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A MONTHLY JOURNAL DEVOTED TO MEDICINE & SURGERY

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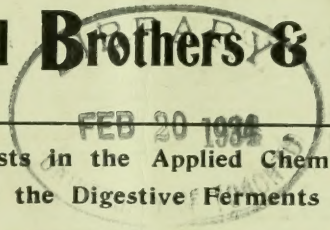

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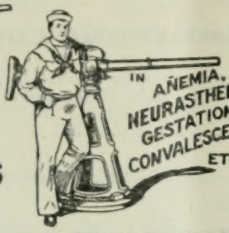

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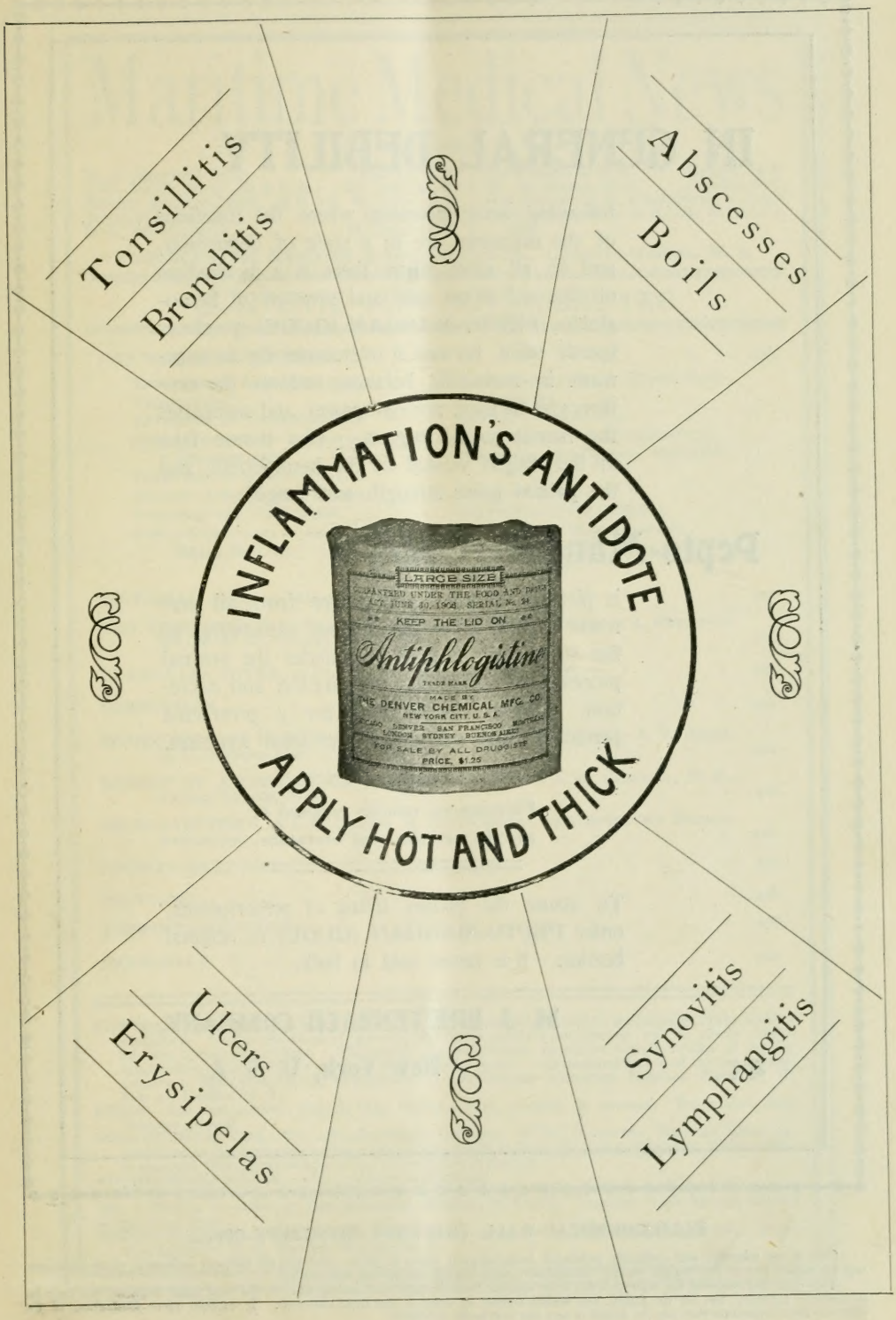
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Treatment of Acute Pneumonia

This forms the subject of an important communication by S. West, to the *Practitioner* for April. West says that pneumonia, though a germ disease, is not infectious in the sense that it does not spread from the sick to the healthy. He shows by a chart from the registrar-general's figures the strikingly parallel course of the mortality from pneumonia and influenza between 1889 and 1905. He divides treatment into: 1, Prophylactic and preventive; 2, antibacterial and antitoxic; 3, symptomatic. Under the first heading he calls special attention to the importance of a careful mouth toilet, especially during the course of specific infectious fevers. Avoidance of cold and fatigue, especially by influenza convalescents, is enjoined. The antitoxic and antibacterial treatments are at present beyond our reach, but he hopes that before long we shall be able to have some antitoxic treatment for pneumonia. In a mild, uncomplicated case a cool room and plenty of fresh air are essential. The outdoor treatment may be suitable for hospitals, but is hardly available in most private cases. Milk, two or three pints, and two eggs, with beef tea, in the twenty-four hours, constitute the best diet. Too much milk should not be given. If thirst is complained of, acidulated water may be given or the milk should be diluted with effervescing water. A dose of castor oil or a pill of calomel and colocynth should be given at the outset; a diaphoretic mixture may be given if the skin is hot and dry. Expectorants are unnecessary. Counter-irritation or leeches are recommended for pain in the side. It is a good rule not to allow the patient to leave bed until the temperature has been normal for at least ten days. During convalescence the pericardium and pleura should be regularly examined. Hyperpyrexia calls for the cold bath, sponging, cradling or packing. A hot bath is better for children. Antipyretic drugs are to be avoided. Cardiac failure is the great risk in pneumonia. When the lungs are greatly engorged, the patient cyanosed, and the right heart over-distended, great relief may be given by bleeding, free and rapid, a pint or a pint and a half in full-blooded, healthy, florid subjects. It is contra-indicated in the weakly and unhealthy. Stimulants are not ordinarily required, but may be necessary for the aged and feeble and in persons of alcoholic habits. For pain he has not found cold appliances either so successful or so agreeable as leeches or counter-irritation. Hiccough is a grave symptom. Hyoscyamin and veronal, which have been highly praised, are both risky remedies. Sleeplessness, according to its cause, must be overcome by the measures recommended for removing pain or reducing temperature. In extreme cases recourse must be made to morphine, but narcotics of any kind must be used with discrimination.

In the discussion that followed the reading of West's paper at the Harveian Society of London, the proper use of venesection was emphasized, and in nearly every instance the

speakers eulogized the use of leeches for the relief of pain, and all but one spoke highly of the good effects of alcoholic stimulants.

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Venesection.

J. Daland, writing in the *Journal of the American Medical Association* for August 29 remarks on the present neglect of the therapeutic use of venesection, which he attributes to the prejudice caused by its former overuse, the fear of weakening already enfeebled persons, the prejudice on the part of the laity, the failure of many physicians to recognize its indications and limitatons, and, lastly, to the belief that a small weak pulse is an absolute contraindication to blood-letting. Usually it is resorted to as a palliative or life-saving measure, but he points out that it is indicated in certain cases of valvular disease with well-marked failure of compensation, in which there is extreme orthopnœa, cyanosis, tumultuous cardiac action, small rapid pulse, distention of veins of head and neck, weak apex beat displaced to the left and seen and felt over a larger area than normal; increase in area of cardiac dulness to the left and right, and not infrequently accentuation of the pulmonic second sound. Blood-letting is especially indicated if these symptoms and signs are progressive in spite of the ordinary cardiovascular remedies. In such cases twenty ounces of blood may be taken slowly from the median cephalic vein, and if myocardial degeneration is not excessive the relief is prompt. Here the small weak pulse is due to venous congestion and over distension of the right side of the heart. The relief may be only temporary, but it gives ordinary remedies a chance to act which was before impossible. The above symptoms may occur late in the disease affecting the mitral and aortic valves. In well-marked myocardial degeneration, bleeding is useless. Venesection is of great value in mitral stenosis with extreme right ventricular dilatation with failure of compensation and also frequently in such failure of compensation as described occurring in the course of arteriosclerosis. It may also be useful in acute pulmonary œdema from right heart dilatation, and in aneurism of the arch of the aorta the abstraction of eight or nine ounces can temporarily relieve dyspnœa or pain. In all cases of failure of compensation of the kind described, exudates in any of the serous cavities should be removed before resorting to venesection. Lastly, Daland speaks of blood-letting in case of extremely dilated right heart from pulmonary obstruction in pneumonia, in which the abstraction of from 20 to 24 ounces may save life. Certain deaths following venesection in pneumonia are due to a prior formed thrombus; others to previous myocardial disease. The bleeding should, therefore, be not too long delayed to prevent thrombosis or excessive toxæmia. The good results of bleeding in uræmic hypertension and in certain cases of apoplexy are also mentioned.

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Pathology of Tabes Dorsalis.

The pathogenesis of tabes dorsalis is a subject concerning which no very definite and satisfactory conclusions have been reached. A careful review of work on this subject is made by Williams in the *American Journal of the Medical Sciences*, for August, and he reaches the following conclusions, based largely on the work of Negeotte, whose theories seem thus far to have most nearly

approached the true explanation. He says:

1. Tabes dorsalis is a secondary degeneration in the posterior columns, due to a chronic meningitis, very probably of syphilitic nature.

2. The arrangement of the meninges surrounding the radicular nerve renders it peculiarly susceptible at that spot to mechanical or toxic injury.

3. The unequal incidence of the affection upon different fibres of the posterior root is probably due to unascertained peculiarity of structure or arrangement of fasciculi, rather than to any selective toxic influence.

4. The lesions tend toward resolution and arrest, even though the process may continue during the life of the individual.

5. With this arrest, regeneration tends to occur in the radicular nerve, the amount in the anterior root being relatively considerable while that in the posterior root is less in amount and functionally insignificant, as a rule.

6. The otherwise inexplicable vasomotor and cranial nerve symptoms and postmortem findings in this disease are shown thus to be necessary concomitants of the tabetic process.

7. The question of the pathogenesis of the polyneuritic manifestations found in tabetics is not yet answered.

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Early Diagnosis of Pulmonary Tuberculosis. Joseph Walsh, in a paper contributed to the *Medical Record* for September 19, emphasizes the importance of the early diagnosis of tuberculosis, and enumerates the best means of diagnosis. First we must seek the history of an exposure to contagion, in the family, in the occupation, and in the home of the patient. A history of enlarged cervical glands, pleurisy, hæmoptysis, or fistula in ano is an indication of probable tuberculosis in the patient. Protracted cough, inability to take a deep breath without coughing, progressive loss of weight, gastric disturbances, and night sweats are positive indications of tuberculosis. A suggestive symptom is progressive pallor of the skin. General symptoms that are very important are evident *habitus phthisicus*, increased pulse rate, fluctuation of temperature, dyspnœa, hectic flush, clubbed fingers, and bilateral dilatation of the pupils. Suggestive general symptoms are neuralgic pains, general lack of resistance, frequent chilly sensations, central or peripheral nervous disturbances, enlarged thyroid, and herpes zoster. Local symptoms that are diagnostic are change in percussion note with prolonged expiration and râles over limited areas. Very important are unilateral supraclavicular depression in inspiration, granular breathing, suppressed or muffled breathing at the apex, altered vocal fremitus or resonance, and atrophy of the scapular muscles. Suggestivie are deep soreness on pressure, spinal curvature, lessened expansion on one side lessened excursion of the diaphragm, and lessened excursion of the lung.

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Treatment of Hydrocephalus. Permanent Subcutaneous Drainage of the Ventricles in Hydrocephalus forms the subject of a paper by Fedor Krause, which appeared in *Berliner klinische Wochenschrift* for June 22. Krause obtains the necessary drainage by inserting a small silver tube, one end of which lies within the ventricle, the other (divided and bent at right angles) lives under he aponeurosis of the scalp. The liquor cerebri

thus flows toward tissues in which it is comparatively quickly absorbed. In one case, in fact, a small œdematous tumour resulted over the site of the canula, which, however, gradually disappeared. The author has tried this method in two cases of hydrocephalus. In one case of the chronic type in a child of five years of age, the improvement both objectively and subjectively, was marked. In one acute case, the child died; but the author intends to give this method a further trial in acute cases. Krause believes that this operation is also indicated in dilatations of the ventricles due to cranial new growths. In two cases, indeed, the signs of intracranial pressure were notably diminished after operaton.

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Acetone in Inoperable Cancer. The Value of Acetone in the Treatment of Inoperable Carcinoma of the Uterus, is the subject of a paper contributed by F. H. Maier, to the *Therapeutic Gazette* for July. This method, devised by Gellhorn, of St. Louis, has proven highly satisfactory in the author's hands. The procedure, briefly, is the following: Under narcosis, the cancer is curretted; the crater is thoroughly dried and about a half to one ounce of pure alcohol is poured into the vagina through a speculum; for this purpose the pelvis is raised as in the Trendelburg position. The alcohol is allowed to run out at the expiration of 15 to 20 minutes and the cavity is packed with a strip of gauze saturated with acetone. The subsequent treatment consists in similar applications of acetone, two or three times a week, the solution being permitted to remain in contact with the cancerous area about half an hour at each sitting. Improvement consists in the cessation of hæmorrhages and discharges, return of appetite and general improvement in health. The author's experience has been limited to four cases.

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Studies on the Circulation. A. D. Hirschfelder reviews some of the recent physiologic studies on the circulation with their practical bearings on treatment, in the *Journal of the American Medical Association* for August 8. Taking up first the arrhythmias, he divides them into four groups: First, those of neurogenic origin, without cardiac disturbance, disappearing temporarily under atropin, and often permanently under general tonic treatment, hygienic measures and strychin. Second, the group due to diminished contractility is shown in the pulsus alternans, which, though regular, has every alternate beat small. It always shows the heart weakened and working too fast, and if lasting more than a few hours may be taken as indicating that digitalis or strophanthin, intravenously, is called for. Third, the three varieties of heart block, the sino-auricular, the auriculo-ventricular and the blocks between the ventricles. Of the latter we know but little. The sino-auricular block is always functional; as it is produced by digitalis, its occurrence is a contraindication to that drug. The same applies in the auriculo-ventricular blocks, whether organic as in Adams-Stokes' disease, or due to myocardial weakness and vagal stimulation, as in postdiphtheric or postinfluenzal conditions or to the pressure of a tumour on the vagus. Fourth, we have the irregularities due to abnormal impulses, extrasystoles, arising in the auricles, ventricles or bundle of His. The latter group is diagnosed, though with-

out absolute proof, when conduction time is shorter than normal. Ventricular extrasystole may be from inability of the heart to empty itself and be relieved by digitalis, or from too great irritability when digitalis would increase the arrhythmia. Auricular extrasystoles may be from irregularity of impulses or from sudden obstruction to the emptying of a vigorous auricle. Here, as a rule, atropin and digitalis do no good and may do harm. In paroxysmal teachycardia there is a sudden change of rate, almost doubling and almost halving, sometimes associated with irregularities in the transitional stages, but usually perfectly regular. It may be due to the passing on and off of a heart block, and Hirschfelder has experimentally produced it by faradizing the auricles into a state of fibrillation. All the usual cardiac stimulants sometimes fail in this disease. The velocity of the blood flow, as shown by the product of pulse pressure (difference between maximal and minimal pressure) is of some importance in practice, as the general condition in heart cases seems to improve when this product is increased. Hirschfelder also gives a statement of some recent researches by Cameron, under his direction, on the tonicity of the heart muscle, which show that the well-known cardiac stimulants all increase the tone, and strychnin in doses too small to affect the blood pressure—a point of interest, as its effect has been denied. Lastly he notices the relation of leakage of the cardiac valves to the murmurs produced, illustrating the conditions by an analogy with the vocal cords. A small leak with narrow orifice may cause a very loud murmur while a very wide one, like the vocal cords, may cause none.

Sodium Cacodylate in Anaemia and Early Phthisis. A. C. Guthrie writes in the *Prescriber* that he has been using hypodermic injections of sodium cacodylate in cases of anæmia and chlorosis with most encouraging resu'ts. The patients who have shown themselves most susceptible to this treatment were those suffering in addition from slight apical catarrh of one or other lung; in fact, cases where there had been a loss of weight and a suspicion of early phthisis.

Sodium cacodylate or dimethylarsinate is given hypodermically in doses of ½ to 1½ grains. He used the glass ampoules containing sterilized solution, one grain in one c.c. This quantity was injected daily for eight days; after a week's interval another daily injection was given for the same period. It is advisable to use an all glass syringe and to sterilise the needle by passing through a flame. The injection is best made in the lower gluteal region, the part being washed with methylated spirits just before injection.

The results of this treatment have been most satisfactory. In every case there has been marked improvement in nutrition and in the appearance of the patient, also a rapid increase in weight. This increase of weight has been in every case the most characteristic feature of the general improvement. The whole nutritive process of the body seemed stimulated, and that in a very short time. In many cases the improvement was so obvious as to give rise to general remark among the patient's friends. The average increase has been about three pounds per week, and in not a few of the cases this has been surpassed.

Treatment of Acute Septic Peritonitis

J. F. W. Ross, of Toronto, deals with this subject in the September issue of the *American Journal of Obstetrics*. Ross treats diffuse peritonitis by immediate operation with rapid removal of the cause, such as a gangrenous appendix, followed by thorough irrigation of all parts of the abdominal cavity and then complete closure of the wound without drainage. A strong current of saline solution is introduced by means of a long, blunt trocar, which is passed into all the pockets until the fluid returns clear. No great effort to prevent eventration is made, the bowel being reduced by forcibly raising up the edges of the wound. Lymph deposits are not wiped away and all unnecessary trauma is avoided. The author regards general rigidity of the abdominal wall as one of the surest signs of peritonitis. When a patient is first seen in collapse and in the terminal stages of peritonitis, Ross refuses to operate and gives opium. He has little confidence in the Fowler position or rectal saline infusion.

In the series of cases reported 37 died and 25 recovered; of the last 30 cases only 10 died.

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Genital Tuberculosis.

The inadequate attention given to tuberculosis of the genital organs since the publication of Hagar's monograph is remarked by A. Martin, Berlin, Germany, in the Journal of the American Medical Association for September 19. Martin says that, while its primary occurrence from sexual contagion is possible and is to be considered, yet in the great majority of cases it is secondary to tuberculosis elsewhere in the body. It is not easy to estimate its frequency by specimens or autopsies but he is convinced that thorough examinations would show it to be astonishingly common. The clinical diagnosis is usually difficult on account of the characteristic slightness of the symptoms. Tuberculosis of other organs, heredity, and contact with other tuberculous subjects are important in the diagnosis, and Martin attributes considerable value to the von Pirquet test, especially in pregnancy cases. A positive reaction as shown by E. Martin indicates that the patient has still the power to produce antibodies, so pregnancy may be allowed to continue. A negative reaction proves the deep injury that has been inflicted on the defensive powers of the organism, and interruption of the pregnancy is indicated. It is to be hoped that A. Martin's researches will be confirmed by the investigations of others. Ulcers of the external parts are suspected to be tuberculous when their sloughing surfaces are indurated, where undermined borders resist local treatment and when testing shows they are not syphilitic. The microscopic determination in such cases is often very difficult, many slides being needed to reveal the bacillus. The peritoneum shows two kinds of reaction, exudative and sloughing giving rise to the development of hard masses of considerable size. It is impossible to say why the reaction takes one form at one time and the other at another. This tuberculous peritonitis, especially the exudative form, is astonishingly frequent in young girls who rarely show in the beginning any localization in any other organ. The sloughing form was seen by Martin in one-third of his cases, and one-fifth of these were complicated by local infection of the adnexa. Two-thirds were of the ex-

udative, and one-half of these showed local infection of the genitals. The clinical diagnosis of peritoneal tuberculosis can be made in many cases with relative certainty. Ascites is always suspicious in the absence of neoplasms and disease of the heart, liver and kidneys, particularly in young women. The dry or sloughing form of peritonitis gives rise to hard masses simulating neoplasms or inflammatory infection. In most cases these show an abnormal location, not connected with the organ. The history and the localization of tuberculosis elsewhere, etc., will aid the diagnosis. The prognosis in all these cases is grave. There is always the chance of a latent localization elsewhere than where we see it. As to treatment, Martin confines his considerations to local and surgical measures. Ulcers of the vulva and vagina and of the endometrium can easily be removed. In the latter he prefers the application of strong astringents after curetting. Cases complicated with gonorrhœal or septic infection need special care; in these he does not advise immediate operation, but waits till urgent indications call for it. When operation is indicated he prefers to remove only those parts so thoroughly diseased that healing seems impossible. Radical operations cannot be considered here, as the possibility of hidden tuberculosis elsewhere can not be excluded. If possible, he operates by the vaginal route. Ascites he treats by free abdominal incision, by which he can reach his localization as a rule; occasionally only by the vaginal route. The removal of larger nodules and sloughing masses, especially when connected with the intestines; seems to be useless from his experience. Conservative operations were done when indicated, and generally with good results. Especial attention was given to the after-treatment, the family physician, friends, and in case of poor patients some charity organization interested in the case were all instructed in the modern methods of phthisico-therapeutics. In some cases much benefit was observed from the use of guaiacol and creosote preparations. In none of his cases did the operation prove unfavourable in itself, as in no case was it performed except under urgent indication. Of twenty-seven patients observed for over a year after operation, sixteen are well and six have been considerably improved. Lumbar anæsthesia was found well adapted to the cases. In all the cases the bacillus was present; if other cases in which tuberculosis was not so definitely diagnosed were included, the results would be still more favorable.

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Treatment of Placenta Prævia. Hammerschlag, according to his article appearing in *Medizinische Klinik* for April 26, always tells the family that the child is doomed when called to a case of placenta prævia. In his one hundred and ninety-one cases only sixteen per cent. of the children survived. He advises against tamponing except when the patient is to be carried to a hospital during hæmorrhage; the colpeurynter is better to arrest the bleeding. Tamponing with the body of the child by traction on one foot always gave excellent results. He advises it when further expectant treatment is contraindicated or when delivery follows the initial bleeding. In case the cervix tears the uterus, the laceration and the vault of the vagina should be tamponed firmly at once with scrupulous asepsis. A pad should be fastened to exert pressure on the uter-

ine artery. This tampon should not be removed for forty-eight hours. It is better not to suture the tear, as all of it is seldom accessible. The cervix was torn in five or his cases by incorrect delivery of the head, continuous traction on the foot and excessive straining during the labour contractions. These factors should be avoided.

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Prognosis in Chronic Valvular Disease. Dr. Edward E. Cornwall, in the *Long Island Medical Journal* for June, says that the making of the prognosis in chronic valvular disease except in cases where the end is clearly in sight, is more difficult than in most chronic diseases which have a well-defined pathology. Complete recovery is practically out of the question, though such recoveries have been reported, and the prognosis is limited to an estimate of the length of time the patient is likely to live and the amount of work he will be able to do. This estimate is based on a consideration of factors which extensiviely modify each other's significance, most of which are intrinsically variable, and some of which cannot be foreseen or guarded against. The conclusions reached by the consideration of these factors must a'ways be corrected by circumstances peculiar to each case. In fact, we derive little aid from general principles in making the prognosis in this disease, and must judge each case largely on its own merits. We cannot prognosticate for a particular lesion but only for a particular case.

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Prostatectomy A new method of Prostatectomy is described by Wilms, in *Deutsche Zeitschrift fur Chirurgie* for June. Although the suprapubic method of extirpating the prostate is the operation which is advocated by most surgeons at the present writing, the author believes that the perineal route offers so many advantages that it would find a great deal more favour if chances of injury to the rectum could be reduced. With this in view he has successfully applied the following procedure in three cases: An incision of 4 to 5 cm. long is made directly over the descending ramus of the os pubis on the left side. Through this wound the left lobe of the prostate is easily accessible, lying no deeper than 1.5 cm. The M. ischiocavernosus and the accompanying pudic artery are displaced towards the median line, and, after the introduction of a catheter into the bladder, the capsule of the prostate is incised and both lobes are enucleated through the one incision. The postoperative treatment is the same as in other cases, the usual perineal drainage being employed.

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Treatment of Otitis Media. In an article entitled "The Present Status of the Radical Mastoid Operation for the Cure of Chronic Purulent Otitis Media," appearing in the *Medical Record* for October 10, Wendell C. Phillips states his belief that chronic purulent otitis media is the result of unskillful treatment of acute attacks or failure to prevent recurrence of attacks of otitis media. Recurrent attacks are an indication of the presence of adenoids or enlarged tonsils. This disease should be first subjected to simple local treatment with removal of adenoids and tonsils for some months before a radical operation is undertaken. Perfect drainage should be established and granulations removed and the tympanic aperture enlarged. Careful ir-

rigation must be done daily and treatment should not be left to the parents or nurse, but should be carried out by the physician himself. An ossiculectomy may be sufficient if the necrosis of bone is not extensive. It is less dangerous, requires less after treatment, and is more easily agreed to by the patient. A radical operation becomes necessary when bone neurosis is extensive. All necrosed tissue is removed, and a large permanent cavity created which is allowed to become dermatized. This operation is indicated when the treatment has not caused permanent cessation of discharge, and curetting and removal of the ossicles has not brought about a cure; when acute mastoid symptoms are present; when there is a sudden cessation of discharge with vertigo; when facial paralysis appears; when there is vertigo or involvement of the lateral sinus; when there are cholesteatomatous deposits, or fistulous openings; and when extreme depression occurs. It is contraindicated when tuberculosis is present; in very young children; in all cases where the disease is confined to the tympanic cavity and ossicles; and in adults with scanty discharge without odour.

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Treatment of Blepharospasm. E. Valude considers injections of alcohol in the treatment of Blepharospasm in *Annales d' Oculistique* for April. He reports three cases to show that alcohol injections made at the point of exit of the facial nerve constitute an excellent means of treatment, and are inoffensive and but slightly painful. It is of great value in trigeminal neuralgia. Moderate facial paralysis may follow the injection, but this usually disappears under treatment. It must not be allowed to develop to such an extent as to interfere with closure of the eyes during sleep (lagophthalmos), but be counteracted by electricity and massage. Valude claims that the patients will prefer immobility of the cheeks and lids to the discomforts of spasm. The alcohol is used in 80 per cent. solution with stovaine, injecting from 1 to 1.5 cc. The injection should be made slowly, moving the point of the needle around the supposed point of exit of the nerve. Usually only one injection is required, and cure is generally permanent. Exposure of the cornea, in case of development of facial paralysis, may have to be prevented by occlusion, provisional suture of the lids, or temporary blepharorrhaphy, and the use of electricity.

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Resection of Elbow-Joint. Resection of the Elbow with Maintenance of Motion forms the subject of a paper contributed by von Schmieden to *Berliner klinische Wochenschrift* for August 17. The operation performed at Bier's clinic is as follows: The end of the humerus, after resection, is made convex, while those of the radius and ulna are made concave, so that the physiological relations are maintained. A flap of the triceps muscle and tendon is then brought between the ends of the bones and sutured to the tissues on the anterior surface; the wound is closed. At the end of one week, motion at the elbow is begun, the joint being placed in a different position on each successive day. When the wound has firmly healed, massage, active and passive motion, and hot air baths are in order. Von Schmieden emphasizes a few points that are essential to the success of the operation. In the first place, just sufficient bone must be resected; if too much bone is taken away, there

will follow too much motion in the lateral direction. If too little, limitation of motion will ensue. The surgeon must also be acquainted with an excellent x-ray picture of the joint before operation, in order to enable him to remove all projecting surfaces and isolated masses of bone that might otherwise be overlooked. In two cases, necrosis of the implanted muscle has occurred, but this did not entirely negative the functional result. An important element is the musculature of the extremity; if this is atrophied from disuse or disease, the result will, of course, be not as good as if the muscles are well developed. Of eleven cases, the end result was excellent in six, four were improved; one was unimproved, due as the author believes, to arthritis deformans.

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Scarlet Fever. C. G. Kerley, in the *Journal of the American Medical Association* for October 24, gives the results of personal observation of over five hundred cases of scarlet fever. While he considers the disease both infectious and contagious, in his opinion transmission otherwise than by personal contact is unusual. There is also less likelihood that the unprotected will contract scarlet fever, especially early in the disease, than there is of their contracting measles or pertusis under like circumstances. The susceptible age is between the first and tenth years. Cases in infants under 6 months of age are very rare. The disease may be mild or very severe and the same character generally prevails through any given epidemic, though this is not without exceptions. The onset is usually sudden, with fever and sore throat, vomiting is less constant. The severity of the disease usually corresponds with the fever; over 104 means a severe case, below 102 the infection is mild. The rash is also very variable and is simulated by that of many other diseases. The throat manifestations are the most constant and of most importance in the diagnosis. The desquamation is also variable, and sometimes absent. Generally, however, it corresponds with the rash and the fever. Kerley had one case of second attack of scarlet fever, occurring six months after a mild one and terminating fatally. The duration of active symptoms is usually from three to seven days in uncomplicated cases. In the management of the disease, we must first keep the child as comfortable as possible, allow plenty of fresh air, give a reduced diet, see that there is one bowel evacuation daily, give sponge baths with cool or lukewarm water according to the body temperature twice daily, followed by inunction with vaselin or cold cream. Daily inspection should be made for complications, watching the kidneys, the throat, the heart, the ears, and the glands. The throat is the most important, and to all patients with pronounced angina he gives chloride of potash internally and peroxide of hydrogen in sprays or gargles. The chloride of potash is to be given in small doses, from three to four grains every two hours and not more than five doses in the twenty-four. He has never seen harm result from this. Heart weakness calls for stimulation, the choice being between strychnin, strophanthus, and digitalis. Alcohol is given only in severely septic cases. With extensive throat involvement, with œdema, false membrane, and sloughing, Kerley uses irrigations, with warm salt solutions (120 F.), the technic of which is described. A certain amount of coughing during the

irrigation is beneficial, loosening the pus and sloughing tissue. No better preventive against the development of adenitis exists than the cold compress to the throat, which should be applied on the first sign of gland involvement and repeated at hour intervals. The pyrexia should be treated on general principles and according to the temperature. If it causes restlessness, loss of sleep and rapid heart action, means of reduction by the sponging or the cold pack should be used. For sponging he uses one part alcohol with three parts water at about 80 F. Full directions for the use of the cold pack are given. The water should be used first with a higher temperature, but gradually reduced so as to avoid shock and fright. For the first hour or two in a pack the temperature should be taken every half hour and when it is reduced to 102 F. the pack should be discontinued to avoid too great reduction. If it rises again rapidly to 105 F. or higher it is well to keep the patient in the pack continuously. The temperature of the pack is seldom reduced below 70, or perhaps 60 if necessary. The degree of cold required to keep the temperature within safe limits can easily be learned in any individual case; a very sudden reduction might cause collapse. In cases readily controlled the pack may be necessary for only one-half hour or an hour at intervals of three or four hours. An ice bag to the head may be used with it to advantage.

EDITORIAL.

HOSPITAL MANAGEMENT.

The American Hospital Association met in tenth annual session in Toronto during the week ending October 3rd. About 130 delegates registered, but a large number of visitors were also present. Many interesting and instructive papers were read. "A Layman's View of Hospital Work" was the subject of a racy paper read by J. Ross Robertson, chairman of the trustees of the Hospital for Sick Children, Toronto, one of the best known journalists in Canada. As is well known, Mr. Robertson is a busy man, yet he has found time to give a great deal of attention to hospital affairs, and with a view of enlarging his knowledge has visited at various times during the past thirty years, a large number of the best hospitals in Great Britain and the Continent of Europe, and nearly every State in the American Union. In a brief, but concise manner, he gives his impression about the maintenance, management and other details of hospital work. The most novel and suggestive feature is his presentation of the subject of Hospital Literature, which we feel justified in quoting fully:

Hospital Literature.

"Annual reports of public institutions may be included in the lists of latest publications, but notwithstanding the interesting topics therein discussed, hospital literature, be it said with regret, is not sought after by those who look for popular reading at the counters of circulating libraries.

"The day has not arrived—it may be

on the way—perhaps it has a stop-over ticket—when popular literature will have as one of its competitors the hospital report.

"It struck me ten years ago that the driest and most uninteresting reading was our annual report. The subject matter was all right, but it did not seem to be placed before the public in proper form.

"So I commenced to illustrate our reports. I got away from the stereotyped official expressions that such reports are generally loaded up with, and instead of the report reading like "the minutes of the previous meeting," I told all about our work in story form.

"I sub-headed the reports according to subjects. I used a good calendered paper, and called to my aid the photographer and the engraver. I gave in half-tones the actual daily life in the wards. I exemplified our work in the orthopedic branch by ordering that every case of clubbed feet, in fact every surgical case that could be photographed, should be so done.

"I photographed every case the day it entered and the day it was discharged. I half-toned these photos, one of which showed the crippled boy when he was admitted to the hospital, and another when his deformity was corrected.

"The publication of these photos of "Before and After" the operation were admirable exemplifications of our work—a first-class object lesson that brought coin to our coffers, for the public realized just the great amount of good we were doing. I followed this "Before and After" idea up in cases of bow legs and knock knees, and also in every case of hare-lip that had successful results.

"The daily life in our wards—the nurses moving about from bed to bed—the children at their games—all had to answer the call of the camera. All material was made available for illustration, even the taking of a swab and its progress through the culture tube, the incubator, on the slide, with the stain and under the micro; a plaster jacket in all its stages; the search for the nickel in the gullet of some youngster who swallowed the coin instead of buying the candy; a needle from its point of entry, and its travels till located by the X-ray—all these are brought to the public eye through our fifty-six page report. We publish 12,000 of these, one for every donor; and we also issue a booklet of 24 pages with our larger report, condensed in paragraph form, and interspersed with small half-tones. Of these we send out 225,000 copies.

"We advertise, and, what is more, pay for advertisements in the Toronto daily papers, and all this literature we send out just before Christmas is at a cost for postage of about $2,500, and when we count our cash about the first of March we generally average about $30,000 as the result of our appeal."

THE DIAGNOSIS OF EARLY PULMONARY TUBERCULOSIS.

By A. FREDERICK MILLER, M. D.
Trudeau, (Saranac Lake) N. Y.

[EDITOR'S NOTE.—This paper was prepared for the annual meeting of the Maritime Medical Association held in Halifax on July 1 and 2, but owing to Dr. Miller's inability to be present it was not read there. It therefore gives us special pleasure to present it herewith, as all who were disappointed in not hearing it, now have an opportunity of benefitting by it.]

I WISH to say something to you about the early diagnosis of Pulmonary Tuberculosis. While the profession to a man recognizes and appreciates the importance of detecting this disease at its onset, the general practitioner does not seem to have a sufficiently reliable and accurate method of examination to enable him to make an early diagnosis. It is the every-day experience of those in charge of sanatoriums for pulmonary tuberculosis to find that the majority of the supposedly incipient cases sent to them by physicians, prove upon examination to be in an advanced, and sometimes, far advanced stage of tuberculosis. Keeping this and the well known percentage of deaths that may be notched up to its ravages in mind, and knowing that from seventy to eighty in the hundred may be cured if treated in time, the importance of early diagnosis may appeal to you afresh.

The cause of the delay in recognizing an early tuberculosis lies (1), with the patient; (2), with the physician.

I.—The patient fails to recognize the insidious onset of the disease through ignorance of the nature of his trouble. Loss of strength, weight or appetite, unless marked, extending over a period of some months, causes little or no worry. Slight cough or expectoration in the morning means no more to him than a nasal or pharyngeal catarrh, and unless a sharp warning comes in the shape of a brisk hæmoptysis, the malady is allowed to pursue its course until his condition becomes so marked that a visit to a physician becomes necessary. His trouble may or may not then be recognized. This period of delay may extend over four or eight months.

II.—Hitherto our medical colleges have failed to provide for their classes such cases of tuberculosis as are suitable and valuable for examination. Every student is familiar with the advanced and far-advanced case, just as the public is. Ask him if he has ever examined an incipient case and his answer is invariably "No." Little accommodation except in sanatoriums has been made for this class of patients, and until we make provision and afford proper facilities for the instruction of students in the practical diagnosis of *incipient* tuberculosis, we need not expect much advance in an earlier recognition of the disease than has been attained in the past.

Failure to recognize a beginning tuberculosis, apart from the lack of training and clinical facilities while the physician is a student, is due to a number of things. It seems to be difficult for practitioners to realize that a person apparently in good health so far as appearance goes may have the malady. It is, however, a daily occurrence for such men and women to come to the Saranac Lake clinic to see if they have it. Examination in many cases reveals extensive trouble. Inquiries put to a large number of these has convinced me that while something may be placed to the account of a hurried and imperfect physical examination, failure

to establish an early diagnosis is due chiefly to two things, viz., a careless and incomplete clinical history, and failure to have the patient cough during auscultation.

Too little attention is given to the clinical history. Its importance cannot be exaggerated. Very often it will establish the first link in the chain of evidence of a probable diagnosis. Although there are some cases in which the disease has come on so slowly and so insidiously that the patient cannot recall its onset, they are comparatively few. The majority are able to trace their illness back to a definite period associated with definite symptoms.

The history should be taken methodically or important points relating to the onset will be lost. This embraces amongst other questions the (1) Family History; (2) Present History: *a* Hygiene, *b* Work, *c* Diseases patient been subject to; (3) Present Illness: *a* When the trouble began, *b* How the trouble began.

The history in general will run somewhat as follows:

"Some four or six months ago the patient began to feel languid and tired; had slight loss of appetite, strength and weight; began to cough. Or possibly, he dates his trouble from a cold which was followed later by cough and expectoration; had temperature and a few night sweats; no hæmorrhage or pleurisy. These symptoms persisting, he had finally gone to his doctor for advice." In other cases a hæmorrhage was the first symptom to be noticed, although if the history is fully inquired into, there is generally a period, such as I have described above, antedating the hæmoptysis.

It will be noticed that cough is a most frequent though not invariable symptom. It often occurs early and draws attention to the lungs. Loss of weight, strength and appetite, are also almost invariably present. Hæmoptysis occurs in a small proportion of the cases, and it should be remembered that "Anyone having one dram or more should be considered tuberculous till the contrary be proved."

The patient should be examined in a well-lighted and quiet room. He may stand at ease, or sit in a revolving chair with his hands hanging loosely at his side. He should be stripped to the waist and a blanket or shawl thrown over his shoulders. Female patients do not object to this necessary exposure. The chest, as examined by many physicians, is not thoroughly bared, particularly with women. Why it should not be I cannot say. Women are just as entitled to a complete search as men. The chest should be examined systematically, and every portion, front and back, gone over thoroughly. The stethescope should be applied at least twice in every interspace, and great care taken to explore the supra- and infraclavicular fossæ. At the conclusion of the examination, the result should be charted for future reference.

Inspection and palpation yield little information in a beginning tuberculosis. Percussion is of little value except to those whose ears have been trained to detect slight variations from the normal lung note. Auscultation is by far our most valuable method in determining early pulmonary changes.

At the Saranac Lake clinic it has invariably been our rule after listening space by space on quiet breathing to have the patient cough, and immediately after take in a full, deep inspiration; the same procedure is gone through as in quiet breathing,

auscultating space by space until the whole lung is gone over. Failing to hear abnormal lung sounds, the patient is directed to blow his breath out, cough, and then breathe in. This will bring out rales heard in no other way.

Unfortunately there is no sign invariably present in tuberculosis. Location of the physical signs is important. Rales heard constantly and upon repeated examination at an apex is indicative of tuberculosis. Rales at the base are of less importance. There may be little or no change in the vesicular murmur. Prolonged expiration, roughened or weakened breathing at an apex is suspicious, and also suggestive of tuberculosis.

Too often the physician is afraid in the absence of tubercle bacilli in the sputum, or even in the presence of tubercle bacilli, to impart to the patient the knowledge that he has tuberculosis. And here let me remind you again of the value of the sputum examination. Unfortunately it has not received the attention it merits. I am surprised at the number of patients who come to Saranac Lake with tuberculosis who have never had their sputum examined, nor even a specimen asked for by their examiner. Gentlemen, should a patient come to you to-day with a suspicious history of tuberculosis and tell you that during some part of the day he has slight expectoration, you gravely fail in your duty if you neglect to ask for a specimen. One observation is of little value if tubercle bacilli are absent. At least three to six specimens shoud be asked for and examined on consecutive days before satisfying yourself that they are absent. If they are present ulceration has already occurred and the case is no longer in the incipient stage.

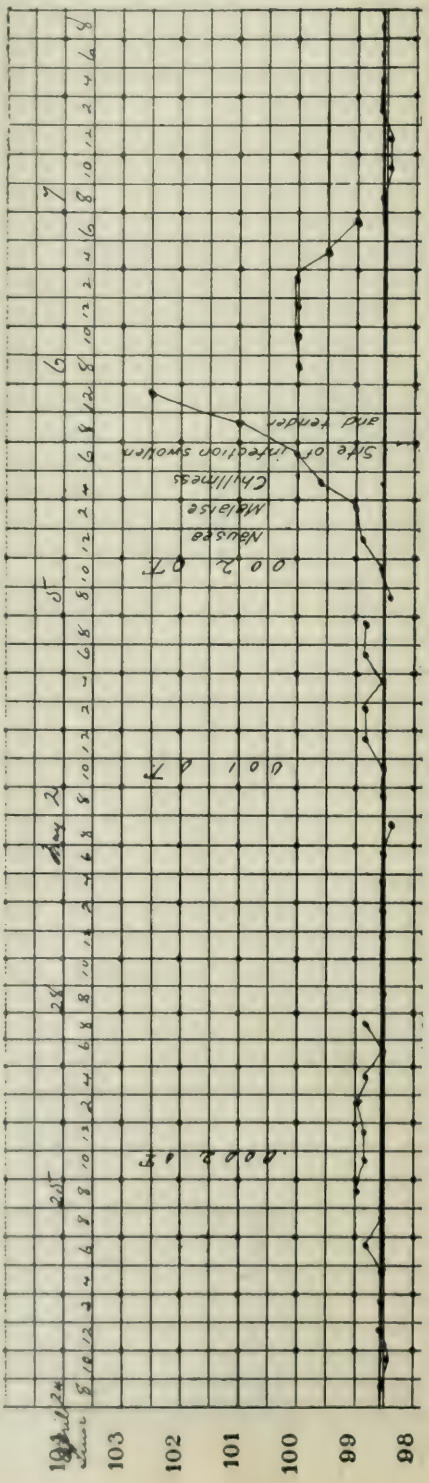
Various methods have been recommended for the staining and detection of the tubercle bacilli. I have found the following to give on the whole, the best results. A small portion of the sputum, a caseous particle, if possible, is selected, with a sterile platinum loop and placed on a clean glass slide. This is crushed and spread out evenly against the surface of another slide. The specimens are dried and fixed by passing them several times slowly through the flame. Carbol-fuchsin is added to the smear and the slide gently heated from three to five minutes; then it is decolorized in Acid Alcohol (HCl 3cc. Alcohol 97cc., or HNO_3 10 per cent. and Alcohol), till it assumes a pearl-grey color. It is now immersed in Lœffler's Methylene Blue from 15 to 30 seconds, washed in water, and examined in the usual way.

As soon as a diagnosis of tuberculosis is made, the patient should be acquainted with his condition. He should not be allowed to rest under the false security that he is suffering from weak lungs or bronchial catarrh. Sooner or later a period comes when the facts must be made known. Valuable time has been lost and the disease allowed to progress into the advanced state. The question, "Have I tuberculosis, Doctor?" should be met squarely and honestly. My answer has invariably been a candid one and I have yet to note any ill effect or harm result from telling the patient of his condition. A bond is established between the two which is of great service in carrying out the prolonged treatment necessary for a cure.

In conclusion, let me refer to the value of tuberculin as an aid in clinching an early diagnosis. That it is of value there can be no question. Despite the disastrous results which followed its improper administration

in 1890 when Koch first announced his discovery of a tuberculin which would cure tuberculosis, Trudeau in America has constantly used it during the past 16 years for therapeutic and diagnostic purposes. My personal observation is, that, when given in proper doses under careful supervision, it is free from danger. And yet, I cannot recommend its indiscriminate use. It should be tried as a last resort and only after all our other well-known methods have failed to give us the information we seek. Today we speak of the subcutaneous, conjunctival, cutaneous, and percutaneous methods of administration for diagnosis.

The subcutaneous method has been given for many years at the Adirondack Cottage Sanitarium to all patients whose sputum contains no bacilli after repeated examination. Koch's original tuberculin, "O.T.," is used and diluted with physiological salt solution and phenol .25 per cent. The first dose should be sterile salt solution to exclude a "nervous reaction," then 1-5, 1, 3, 5, and 10 mg. of the original tuberculin should be given. Some authors believe 5 mg. should be the maximum dose. With this view I cannot concur as I have seen undoubted tuberculosis fail to react to 5 mg. and yet react sharply to 10 mg. The occurrence of a reaction, which may appear within three hours or be delayed till the 36th hour, manifests itself usually by the following phenomena: (1) Changes at the site of injection: the usual signs of inflammation, pain, redness, swelling and tenderness. (2) General or constitutional fever and its associated symptoms of headache, malaise, nausea, sometimes vomiting and pain in the limbs. (3) Local or changes at the site of the tuberculous lesion: increase of cough and expectoration. Physical



signs may or may not be more evident. I cannot discuss the symptoms in detail. The reaction subsides at the end of twenty-four to thirty-six hours. The temperature falls by lysis or crisis. The chart, which I show you, explains itself.

THE OPHTHALMIC OR CONJUNCTIVAL TEST.—In 1907 Wolf-Eisner and Calmette, working independently, were the first to suggest the conjunctiva as a favourable site for the tuberculin test. Calmette, by precipitating crude tuberculin in ninety-five per cent. alcohol and dissolving the residue in sterile water, prepared a 1 per cent. aqueous solution. A drop of this is instilled into the eye of the patient. From the sixth hour onward swelling of the caruncle and congestion of the palpebral conjunctiva is noted in tuberculous subjects. The inflammation persists for two or three days and then subsides. There is absence of constitutional symptoms.

Personally I feel we must use the greatest caution in instilling tuberculin into the conjunctival sac. My own experience has been limited. I have seen two disagreeable results, one of which I will report. "A patient was given the ophthalmo-tuberculin test before entering the sanitarium. On the morning following the instillation, the conjunctiva was considerably reddened and by evening the reaction had apparently attained its maximum showing increased lachrymation and œdema of the eyelids. The eye symptoms did not abate, but rather grew worse. Three weeks later the case was admitted to the Adirondack Cottage Sanitarium. Examination revealed a phlyctenular conjunctivitis. Under appropriate treatment the phlyctenulæ disappeared from the margin of the cornea. A few days later a small opacity was observed centrally in the posterior layers of the cornea. This has gradually increased in size and now measures 1.5 x 3.5 millimetres.

Von Pirquet, in the spring of 1907, suggested the scarification of the skin through a drop of diluted tuberculin as a measure in the diagnosis of tuberculosis. The skin is first rubbed with alcohol and through a drop of a 25 per cent. solution of Koch's old tuberculin, scarification is made with Pirquet's "schaber" or any sharp instrument. No blood should be drawn. A control vaccination is made with sterile bouillon or sterile salt solution. The same lancet may be used for both, care be taken to begin at the control. In tuberculous individuals when the reaction is positive, a small papule forms surrounded by an erythematous zone in four to six hours after the vaccination. This reaches its maximum in 24 hours, and by the third or fourth day has disappeared, although it may persist for a week or more.

E. Moro, suggests the use of 50 per cent. O. T. in lanolin, a small piece to be rubbed over an area of 5 cm. in the epigastric region. Reaction may occur within a few hours to forty-eight hours, and is characterized by the appearance of a number of small papules varying in size from one millimetre to one cubic centimetre, and in number from one to one hundred. Practically the same result may be attained by rubbing in a drop of undiluted tuberculin.

In conclusion it is essential that practitioners familiarize themselves with the picture of early pulmonary tuberculosis. A careful clinical history, in the vast majority of cases, will help greatly to establish the presence of this disease. The absence of physical signs does not exclude the presence of tuberculosis, and no examination should be considered complete till the patient has been requested to "cough" during auscultation.

GLANDULAR FEVER.

By P. E. BUTLER, B. A.

(Read before the New Brunswick Medical Society, July 21st and July 22nd, 1908.

AS glandular fever has received but little attention in most books of medicine, and has been omitted entirely in others, it is with a feeling of trepidation that I approach you with a paper thus entitled, but after searching all available authorities, and finding nothing more appropriate to cover the cases about to be described, I must adhere for the present at least to this diagnosis.

These cases developed in children from 9 months to 9 years of age, were epidemic, occurring from the month of November, 1907, to the month of April, 1908; with acute symptoms lasting three or four days, and enlargement of glands continuing ten or fifteen days. In one case extending over seven weeks.

1ST CASE.—A little girl four years of age was the first case in which this condition was noticed.

Family History.—The family revealed a tuberculous diathesis. Several uncles and aunts dying of pulmonary phthisis.

Personal History.—Her personal history was good. Healthy from infancy with the exception of minor ailments.

Present Illness.—The onset of present illness was sudden, ushering in with slight chills, fever, vomiting and stiffness and soreness on moving the head and neck. Within twenty-four hours the post-cervical glands on both sides were swollen to the size of beans, and very sensitive. Tonsils and pharynx reddened, bowels constipated, pulse 110, respiration, 22, temperature 100°F.; Other symptoms normal. Fever of a moderate type continued for four days. Glands palpable until the 12th day.

Within a few days, two other members of the family (aged 10 months and 3 years respectively) were similiarly affected with practically the same symptoms, running the same course, and terminating about the same time.

A number of other cases in the community, requiring very little attention were also noticed. Two or more members of each family attacked.

DIAGNOSIS GLANDULAR FEVER.

2ND CASE.—The next case of any importance occurred in a child of three, previously healthy, and with a good family history.

When first seen the temperature was 101° F. Pulse, 112. Respiration, 40. Slight cough, dry and hard.

Examination of lungs revealed a few sibilant rales. No dulness. Appetite poor, bowels constipated. Two days later bronchial condition improved, but child very fretful and peevish. Not wishing to be moved, and crying whenever she was handled.

The submaxillary glands on one side and post cervical on the other were swollen and tender. Within a short time other glands in neck involved, and inguinal glands on both sides, varying in size from a pea to a marble. Fauces reddened. Temperature 99 to 100 2-5. Pulse 110 to 125.

The acute symptoms subsided on the 9th day, but convalescence was protracted over three months. The legs remained stiff, the child walking with a stoppage-gait, and stumbling over every object in the course. Patillar reflexes absent, throughout, and not elicited until after the third month.

Diagnosis.—Diagnosis: glandular fever followed by neuritis.

3RD CASE.—The last case to be described was of a more severe type, ending fatally from complications after a course of nearly nine weeks.

Previous Health.—His previous health had always been good, but he was never considered very rugged by the family.

Family History.—One uncle had had some hip trouble, but fully recovered.

The Present Illness.—The present illness came on suddenly. While at play he began to complain of pain and soreness in the legs. Little was thought of this and household remedies were applied. When called on, the eighth day, a history of chills, slight fever, poor appetite, vomiting and obstinate constipation was elicited.

Present Condition.—Patient thin and anæmic, slightly flushed; Dorsal dembitus, legs drawn up. Temperature, 102° F. Pulse, 120, small but regular.

Examination of the lungs, negative. S'ight systolic murmur at cardiac apex transmitted up left of sterum. Second pulmonary not accentuated. No apparent enlargement of heart.

Digestive System.—Tongue coated, breath foul, bowels not moved for four days. Abdomen flat, giving dull note over the large intestine. No tenderness.

Nervous System.—Pain almost unbearable, causing sleeplessness and some mental confusion at times.

Urine.—Urine when examined the following day was of a muddy straw colour. Acid reaction, S. G. 1022. No albumin. No sugar. Some amorphous urates.

Glandular System. — Inguinal glands on both sides swollen to the size of a bean, tender and painful. Eight days later glands much smaller, soreness gone, only to be followed by involvement of the right axillary group, and three days later, of those in the left, then in succession with intervals of three and four days. The right post-cervical, left sub-maxillary, left anterior cervical, right carotoid, right sub-maxillary and anterior cervical became affected. Then a recrudescence of those in the axilla co-incident with enlargement of the left femeral, and two days later the right femeral glands, with phlebitis in both legs. Then a recurrence in the right sub-maxillary and enlargement of right parotid, quickly followed by a knotted condition of all the glands of the scalp, ranging in size from a pea to a good sized bean. Only two groups tender at any one time. Those first affected diminishing in size as new ones became involved, but remaining palpable.

Lungs.—On the 21st day of the disease, a slight cough developed with pain at the base of the right lung, and accelerated respirations. A small area of dulness could be detected at the base, with crepitant rales. A few days later rales heard in right lung which remained present until the end, but only an occasional cough was heard, but no expectoration, so that no sputum could be obtained for examination.

Temperature. — The temperature throughout remained moderate: 99 to 101 3-5, one or two days normal. with onset of pulmonary signs. Temperature, 103 for three days, with slight remissions. Morning and evening temperature varied, sometimes higher in the morning and vice-versa. With each involvement of new glands temperature increased.

Sweating.—Sweating at irregular intervals present throughout.

The Pulse.—The pulse varied with the fever, ranging between one hundred and one hundred and twenty, until towards last few days, when it rose to one hundred and forty.

The Abdomen.—The third week of the disease, pain and distress were complained of in the abdomen, and I thought that I was able to palpate a few glands over the omentum. Spleen palpable, liver slightly enlarged.

The Urine.—On account of a slight puffiness under the eyes and muddy complexion, the urine was examined daily throughout, both quantitative and qualitative, with the following result:

Average daily amount, one quart. Colour, dirty straw. Reaction acid S. G. from 1018 to 1025. At one time Dr. Young, who was in consultation, found it as low as 1012. No albumin except in one specimen, which showed only a trace. No sugar. Amorphorous urates abundant with every rise of fever. No casts found.

Blood.—Several blood slides were prepared, but unfortunately no report was received from them.

Eight days before death, which occurred at beginning of the ninth week, there was a complete loss of vision, pupils dilated. No reaction to light or distance. No retinal examination made.

Swelling which began in the feet with development of phlebitis, extended up the legs, and the day previous to the time of death the abdomen became suddenly distended with ascites. The child, who had been bright throughout, was only semi-conscious the last few days.

Diagnosis.—Glandular fever—complicated with broncho-pneumonia, and terminating either with acute nephritis or blockage of the portal circulation.

Dr. Young's Cases.—Since 1903, Dr. Young, of Vanceboro, has attended several cases of glandular enlargement, which he would only classify as glandular fever. Four cases in 1903 were noted in one family. Three in 1905 in another, with recurrence in the same family in 1907. The glands affected were the submaxillary, anterior, cervical and parotid. Differing from cases already cited in the size of swelling, some obtaining to the size of a goose egg only. The fever was moderate throughout. Onset sudden, with slight chills, general malaise, pain over affected area, and constipation. Course of acute symptoms, five to seven days. Enlargement lasting until the end of the 2nd or 3rd week.

Differential Diagnosis.—From the brief articles on glandular fever, the existence of such as a separate disease is still sub-judice, the enlarged glands being attributed rather to lymphatism, excited by toxic substances, swept through the system from an infected focus, but cases occurring in epidemic form with no apparent localizing cause, and the absence of the eruptions which characterise the erruptive fevers, is evidence of a disease, the etiology of which is still obscure.

The neuritis in one case and the complete systemic involvement in another, would indicate a poison well diffused throughout the body, while constipation would suggest an auto-intoxication from the intestinal tract as a possible factor in its production.

The only diseases to be differentiated would be acute adenitis, syphilis, general tubercular infection, Hodgkin's disease, and influenza. All of which with the exception of the latter, can be readily discarded. Influenza, on the other hand, with its many phases, is a little more difficult to

eliminate, as glandular involvement has been noted during some of the epidemics. The absence of grippe in adults at the time and neither coryza, pulmonary signs, intestinal symptoms or neuralgias being present, would, I think, settle the diagnosis.

Concerning the diagnosis of Bright's disease in the last case, I was in doubt, as the urinary signs were not present at any time, although the general appearance of the patient would indicate that a nephritis was present and the termination with dropsy and ascites would strongly point that way.

Treatment.—The treatment was entirely systematic.

CORRECTION.

In the annual report of the Registrar of the Provincial Medical Board (1907-1908) in a recent issue, the dropping of a line when making up the form imparted a mixed-up sense to one of the sentences. Near the beginning of the report occurred these words: "A vacancy in the membership was caused by the death of Dr. MacGillvary on April 18th, 1908, when the appointment of Dr. H. E. Kendall, of Sydney, was made." This is quite inaccurate and misses altogether the point that the vacancy on the Board was left unfilled for over twelve months. The words of the report were these: "The vacancy in the membership caused by the death of Dr. MacGillvary in March, 1907, was not filled by the government until April 18th, 1908, when the appointment of Dr. H. E. Kendall was made."

HYDROTHERAPY IN MENTAL AND NERVOUS DISEASES.

By A. T. HOBBS, M. D., Superintendent Homewood Sanitarium, Guelph, Ont.

(Read at meeting of the Canadian Medical Association, June, 1908.)

WINTERNITZ, in his System of Physiologic Therapeutics, says "Hydrotherapy is the systematic application of water at various temperatures and pressures and in varying forms to the surface of the body for dietetic, prophylactic and therapeutic purposes."

To properly carry out the principles of hydrotherapy as laid down by Winternitz, it is necessary to have an apparatus whereby water may be applied at an exact dosage; that is we must be capable of absolutely regulating temperature and pressure to suit the various conditions which we are called upon to treat, if we are to meet with success.

We are still in the embryonic stage at the Homewood Sanitarium as far as hydriatic treatment is concerned, having only had a year's experience with the apparatus as designed by Simon Baruch, of New York city, but the results thus far obtained are very encouraging and lead us to hope that much good may be done along the lines of hydrotherapy. I do not think that I can lay too much stress upon the fact that the treatment must be exact to be successful. Just as you give exact doses of drugs for certain conditions so you give exact doses of water. You expect certain results to follow your water dosage—therefore, I say, be exact.

The good effects of this system of treatment can easily be nullified in the hands of unskilled and unintelligent operators; furthermore, each patient is a law unto himself, and demands close study by the physicians and the bath attendant. Subjective symptoms cannot be entirely ignored and sometimes too strict adherence to a definite prescription may do more harm than good, and the bath attendant must learn by experience to recognize any error in the prescription. On the other hand, however, due care must be taken that the patient does not lead physician and operator astray by misleading statements to their own detriment.

The rationale of treatment in cases ranging from the mildest form of neurasthenia to the gravest form of melancholia generally resolves itself into a question of suitable diet and its proper assimilation. I am well within the mark when I say that 80 per cent. of the mental and neurasthenic admissions to the Homewood present, in addition to their many symptoms, an emaciated appearance and a body weight much below par.

Any method of treatment that will improve assimilation in these neurotic and mental patients is a valuable adjunct to our armamentarium.

In hydrotherapy, scientifically applied, we have, without doubt, an aid to general treatment that will materially assist us in the recovery of our patients.

Time does not permit me to go extensively into the action of water on the various functions and organs of the body, but let me point out a few facts that can be easily demonstrated with the proper apparatus:

(a) *On the Circulation.*—Baruch says "The circulatory system forms the great highway upon which the products for the maintenance and growth of the organism are conveyed, and by which the products of waste and repair incident to the performance of all functions are eliminated. It, therefore, follows that any agent which is capable of exercising the slightest influence upon an apparatus, which is destined for these important tasks, must be capable of exercising in disease an analogous influence upon the organs and their functions which come under the domain of its influence."

These are some of the effects of water so applied:—

Cold water applications cause rise of blood pressure.
Warm water applications cause fall of blood pressure.
Cold enhances the tone of the entire circulatory apparatus.
Warm diminishes the tone of the entire circulatory apparatus.

(b) *On the Composition of the* Blood.—After cold there is an increase of red and white blood corpuscles and hæmoglobin.

After hot air and steam baths a diminution, followed by moderate increase in robust people.

(c) *On Respiration.*—The greatest irritation of the respiratory centre is produced by a cold application on chest and abdomen then follow deeper respirations and an increased oxygen consumption and a freer carbon dioxide elimination.

It must be noted, however, that after cold applications respiration is affected by the extent to which reaction ensues; if the latter is good then respiration becomes much deeper and more air is inspired into the lungs.

If mechanical influences be added to thermic, as in douches, the effect upon the respiratory centre is much more enhanced.

(d) *On Muscular System.*—The fatigue curve is much increased by cold, that is the working capacity is much improved.

Warm baths unaccompanied by mechanical effect lower the working capacity. Combined with mechanical effect warm baths increase working capacity but not to the same extent as cold, or alternating hot and cold.

(e) *On Tissue Change.*—The influence of hydriatic procedures on circulation, respiration, composition of the blood and muscular action, have been stated. If these effects are far-reaching in health, how much more marked must they be in disease. The quantity and quality of the blood in various organs and parts of the body are improved and controlled, and since functional activity is dependent upon the blood supply in the organs, we may, by influencing the latter, readily exercise a powerful effect upon the former. That thermic and mechanical irritation applied by means of water upon the cutaneous surface arouses cell activity and effects tissue change, is a fact that is based upon substantial experimental data.

Accepting these conclusions as correct, as they are attested to by practical demonstration, we are then in possession of an important agent with which to treat successfully many forms of mental and nervous diseases met with, not only by the specialist but by the general practitioner.

Our plan of treatment, to be more specific, has been as follows:—

Neurasthenia.—In all bath treatment it is a fundamental principle that reaction must follow the appli-

cation of cold water. Equally as important is it that no procedure should be prescribed which will in any way frighten a patient, or cause that patient to lose confidence in a method which is new to the large majority of them; therefore, in the treatment of neurasthenia, I make it a practice to employ the milder measures at first and gradually work up to the highest degree of hydrotherapeutic treatment. For example: the patient is only sent to the bath three times a week for the first week, and if their reactive capacity is fair, and they have grown accustomed to the procedures as ordered, they are sent daily.

A general prescription reads as follows:—

Hot air box to point of perspiration.
Circular douche 100° to 90°; 2 minutes; 15 lbs.
Fan and jet douche to entire body 90° to 80°; 10 lbs; 1 minute.

Lower minimum temperature 2 degrees and increase pressure 2 lbs. each treatment, until a temperature of 60° and a pressure of 30 lbs. is reached.

The above prescription is suitable for a female. Male patients can be treated more actively, beginning with lower temperatures and higher pressures.

After the patient has become accustomed to the jet douche, the Scotch douche (alternating hot and cold) may be used with good results.

Usually a walk in the open air to the point of fatigue is ordered to follow the bath.

Melancholia.—The same treatment as outlined above. If it is impossible to place the patient in a hot box owing to some mental phase, I would suggest as a substitute the circular douche at 102° or 104° for two minutes before reducing to 90°, as it is important that the body be well warmed before any co'd is applied.

In the melancholiac, the Scotch douche used freely all over the body markedly stimulates the circulation and imparts a sense of well-being, substituting the depression; and also considerably lessens the lethargy, inclining the patient to greater activity. As the treatment progresses day by day, the period of euphoria lengthens and the depression decreases until finally normal mental health is restored.

Following the bath a vigorous toweling is indicated, more particularly in cases where reaction is not marked. This is usually required in the early stages of treatment in the majority of cases.

In cases of any difficulty with the patient refusing the douches, the nurse steps into the bath and manipulates the patient, at the same time reassuring him.

Dementia Præcox (a) *Hebephrenic Type.*—Some good has been obtained in these cases by the use of stimulating baths of various kinds. The patient should go to the bath daily, and the treatment should be the same as in neurasthenia and melancholia, and gradually be increased in strength. Circular, rain, jet and Scotch douches are indicated with lowering of minimum temperature and increase of pressure each day until the highest point of efficiency is reached.

(b) *Catatonic Type.*

As above.
Results not so encouraging.

Manic-Depressive Insanities: (a) *Manic Type.*—Control excitement by continuous bath at 100° one-half to

six hours according to condition.

Hot or cold packs (cold preferred) continued until excitement subsides. If patient falls asleep leave him in the pack until he wakens; in the meantime keep him well covered with additional blankets. On removing patient from the pack a half bath at 80° or 85° should be quickly given, with active friction to restore tone of dilated blood vessels, and then return patient to bed.

Pack repeated two or three times a day if necessary.

(b) *Depressive*—the same as melancholia.

Exhaustion Psychoses, or Exhaustion following Acute Disease.—Half bath, or drip sheet, or affusions night and morning—temperature 85° to 80°; duration three to five minutes, followed by a vigorous towelling and patient returned to bed. In serious cases the temperature may be reduced to 70° or even 60°.

Baruch says "let the fear of cold water not deter anyone from resorting to cold affusions in these desperate cases. They are the hydriatic substitute for digitalis and alcohol." I can fully endorse this statement as I have recently treated a serious case of exhaustion and collapse in this way, and I can assure you that the result has been most gratifying.

Alcoholism.—Prescription (daily):

Hot air box, 140° to 185°; 10 minutes.

Circular (or rain) douche, 100° to 60°; three minutes; 25 lbs.

Scotch douche, 100° to 60°; five minutes; 25 lbs.

Rain douche, 60°; 30 seconds.

Hot air box may be admitted after first two weeks.

Morphinism-Cocainism.— For the unpleasant symptoms of pain and restlessness during and following the reduction of the drug, I know of nothing better than full tub bath, temperature 102° gradually increasing to 110°, duration 15 minutes at least. May use this twice daily.

In our year's experience with general hydrotherapy most excellent results have been obtained in neurasthenia, melancholia, exhaustion psychoses, manic-depressive insanity and alcoholism. In the other psychoses only fair results have been obtained.

Incidentally it has been found that the use of the perineal douche, temperature 85°; pressure 25 lbs.; two minutes; patient sitting or standing over it, has been useful in chronic constipation. This is only of recent date, but so far results are good. The jet douche, same pressure and temperature, applied to the abdomen, is also useful in torpor of the bowels. Sitz bath in sexual neurasthenia, warm gradually reduced to cold, five to ten minutes.

Much of the success of hydrotherapy at the "Homewood" is due to my first assistant, Dr. E. C. Barnes, who has been untiring in his efforts to place the treatment on a practical basis. In this he has been materially aided by the intelligent co-operation of the nursing staff. By means of lectures and practical demonstrations the nurses have been instructed in the physiology and anatomy of the skin, and the various organs and functions of the body that are affected by hydriatic procedures, the effects of the various kinds of baths and the indications for their use, but above all they have been taught to be exact in all procedures, and have learned to fully appreciate the necessity of this by the gratifying results that have been obtained.

REPORT OF A CASE OF ECTOPIC GESTATION.

By A. A. CAMPBELL, M. D.

Change Islands, Newfoundland.

IT is not my purpose to deal at length with the subject of Ectopic Gestation, or add anything new to this already nearly exhausted subject, but simply to report a case which will probably act as a stimulus to, and encourage the general practitioner to be ever on the alert for this dangerous condition in isolated places where doctors are few, hospitals miles away, and expert surgeons practically unknown.

Mrs. R.—aged 28: I para: family history of tuberculosis. No history of venereal disease; an indefinite history of attacks of severe pain in the right ovarian region lasting a few hours and recurring fortnightly or monthly for a period of about two years.

In the middle of January, 1908, the regular menstrual period was missed and about three weeks later she was seized with an attack of severe pain in the right ovarian region, which lasted, with very slight intermissions, for about two hours, and was relieved by heat. At the same time a slight discharge of dark coloured blood was noticed and continued constantly. Thinking it was one of the old attacks, I was not consulted till after the third attack, and then, thinking it might be neuralgia, gave a sedative, advised heat externally and a hot vaginal douche daily. Unfortunately I was unable to see her again for a week, during which time she had another very severe attack and the vagina suddenly became so tender she could not take a douche.

An examination was insisted upon which revealed enlarged breasts, and a small slightly tender tumour low down in the right iliac region. The vaginal discharges of dark blood continued daily. On vaginal examination the mass was more clearly defined. The uterus was large and apparently separate from the mass. The cervix was softer than normal and displaced to the left. The pouch of Douglas was filled by a soft boggy mass and exceedingly tender, accounting for the pain on taking the douche.

The temperature, which had been taken twice daily all along, was always normal. The pulse ranged between 70 and 80. Appetite and general health good.

Two days after the examination, while treatment and diagnosis were somewhat uncertain, at the usual menstrual time, the decidual membrane came away in two parts. The uterus was now explored by a sound and found empty, and a diagnosis of ectopic gestation about the ninth week made. Two doctors were secured in consultation, with great difficulty. Operation advised, accepted and performed in her own home.

An incision about five inches long was made over the mass, and a few adhesions gently broken down. About one inch from the right of the uterus the tube was much swollen, very tense, and contained a mass which was turned on itself backwards and downwards so that the fimbriated end was well down in Douglas' pouch. Here a considerable mass of blood clot and dark coloured blood was lodged which had evidently escaped from the fimbriated end, probably saving the tube from rupture at the last attack by allowing relief from pressure.

The clot was removed. The uterine end of the tube and uterine artery were secured and cut. The ovarian artery and infundibulo-pelvic ligament were also secured and cut. The tube with the enclosed mass and a cystic ovary were carefully removed by cutting through the broad ligament, the two layers of which were stitched together.

The wound was closed by a fine silk running suture for the peritoneum and heavy silk through the skin and muscle and a dry dressing applied.

On examining the specimen afterwards a fœtus of about eight weeks was found in the tube, extending from about one inch from the uterine end to about half an inch from the fimbriated end. The tube was very tense and thin, but contained no blood, and was probably saved from rupture by the escape of blood from both ends of the tube.

Apart from a prolonged convalescence of two months, in which pulmonary tuberculosis threatened, the patient made a good recovery and is now enjoying her usual health.

PROSTATECTOMY: TWO LARGE ABDOMINAL TUMORS, 40 AND 100 LBS. RESPECTIVELY; GALL-STONE IN THE COMMON DUCT.

By J. M. DEACON, M. D., President New Brunswick Medical Society,
Milltown, N. B.

(Read at meeting of the New Brunswick Medical Society, July 21st, 1908)

(1). SUPRA-PUBIC PROSTATECTOMY.

THE first case I will report is that of a supra-pubic prostatectomy. Mr. H. C. H., of Princeton, Maine, was referred to me by his physician. Age 61 years; widower; height 5 ft., 10½ inches; weight 200 pounds; occupation, wheel-wright and mill-wright.

Family History.—Father died aged 36, of typhoid fever; mother died aged 56, of consumption; and his two brothers and two half-sisters all died young.

Personal History.—Had typhoid fever at the age of fourteen or fifteen years. Considered health good, but had two attacks of rheumatic fever and since the last one, in 1882, has had frequent attacks of trouble with the bladder, having to pass urine frequently by day and several times during the night; and at such times he could not control the urine which would dribble from him while moving around on his feet.

Present Attack commenced August 4th, 1906, following a fall on his back across a log. Did not have to urinate any more frequently, but on passing urine, particularly in the morning, there would be a hot feeling at the end of the penis, and the urine looked turbid after standing. Between 12 and 1 o'clock a. m. of August 13th, 1906, he found himself unable to urinate. About 9 o'clock, a. m., having failed to pass a catheter, Drs. Hoyt and Johnson, under general anæsthesia, evacuated the bladder by aspirating through the abdominal wall.

In the afternoon I was telephoned for to take charge of the case, and, the patient arriving by train, entered the Chipman Memorial Hospital at 7 p. m. I introduced a No. 10 metal catheter without much difficulty, and drew off about a quart of urine. There was blood in the urethra and most of the urine was bloody, only the last few ounces coming clear. The bladder was irrigated with a weak boric acid solution. The meatus was very small, and a slight obstruction was felt at the middle of the urethra, but the great obstruction was in the prostatic portion. The prostate was much enlarged. The urine was neutral in reaction, had a specific gravity of 1030, and the clear portion contained neither albumen nor sugar. The pulse was 66, and the temperature 98.6°.

Directions were left for a powder of urotropin and salol, five grains of each, to be given every four hours, and the urine to be drawn and the bladder irrigated with a mild boric acid solution every six hours.

The patient remained unable to void urine voluntarily, but it came clear during the 14th, 15th, and until into the night of the 16th, when difficulty was experienced by the orderly in passing the catheter and the urine came bloody, and it was also bloody when I passed the catheter at 12 m.n. of the 17th. I therefore decided to do a supra-pubic prostatectomy, and on

the morning of the 18th the operation was performed.

Operation.—The patient's physician, Dr. Hoyt, was present. Dr. Mason administered the anæsthetic, while Dr. Deinstadt acted as my assistant. Failing to pass a soft rubber catheter (which is preferable) I passed a metal one and secured it in position. Having washed out the bladder and left in it twelve ounces of fluid, with the catheter attached to the irrigator suspended but one foot above the patient so that no undue strain would endanger the integrity of the organ, I made a 2½ inch incision, controlled hæmorrhage, placed two sutures through the bladder wall to hold it up, opened into it—avoiding the reduplication of peritoneum in front—and with a finger in the wound found no stones, but a large prostate pushed well up. With two fingers of the gloved left hand in the rectum to elevate and steady the postate, I tore through the mucous membrane covering the left lobe with the fore-finger of my (ungloved) right hand, and, sweeping it around in every direction, I enucleated the prostate from its bed, and delivered it entire with its capsule untorn, bringing away that portion of the urethra with it, and leaving the sheath formed by the recto-vesical fascia intact to form the floor of the bladder and the beginning of the urethra. I then irrigated the bladder with hot water, placed a half-inch rubber drain in the wound and closed the angles, one stitch through the muscular coat of the bladder drawing it up against the lower extremity of the wound so the urine would not filter down through the areolar tissue behind the pubes. The drain was four inches long. There was no excessive hæmorrhage although the dressings were thoroughly blood-soaked during the night.

The prostate was almost uniformly enlarged, the right lobe a little larger than the left, and the posterior portion a little thicker than the anterior. It was 2½ inches wide across its base or bladder surface, 2¼ inches long, and 1½ inches thick. Its weight was 18 drachms and 13 grains. At the apex of the gland the urethral floor had been perforated by catheters, and the gland burrowed through, the false and true passages coming together again at the bladder opening of the prostatic urethra. This is shown in the photographs, the catheter passed through the urethra and the straws through the false openings. (Fig. 1). The other picture on the card is of the bladder surface of the prostate. (Fig. 2). I also have here the prostate itself for your inspection.

FIG. 1.

FIG. 2.

After-Treatment.—The bladder was irrigated through a soft rubber tube passed through the large drain four times in the twenty-four hours. The dressings were changed frequently. The wound healed promptly up to the drainage tube. On the 23rd, the fifth day after the operation, the drain was removed from the wound in the abdomen, a soft rubber catheter introduced into the bladder through the urethra without any difficulty, held in place by adhesive strips to the penis, and the bladder thereafter drained and irrigated from four to six times a day through it, a portion flowing out through the abdominal wound until September 2nd, the fifteenth day after the operation. On this date the catheter was left out, and only returned occasionally afterwards for the purpose of irrigating with a mild antiseptic solution. On September 4th, the patient was permitted to get out of bed. On one or two occasions after that, however, there was a slight escape of fluid through the abdominal wound. His convalescence was uninterrupted and he was discharged September 28th, able to retain his urine or void it at will, and he has continued a well man and doing a well man's work.

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(2). OVARIAN TUMOUR; FORTY POUNDS.

The next case I report is that of a large ovarian cyst. Mrs. S. C. E. was referred to me by her physician, Dr. Vose, of Calais, Maine. Age 60 years; married.

Family History. — Father and mother dead, both of paralysis. Two brothers and two sisters dead, three living, but no history of hereditary troubles.

Personal History.—Born near Halifax, N. S.; married at age of 28; never had any family and never miscarried. Menstruation irregular until after marriage, then regular. Passed the menopause at the age of 45 years. Health always good.

History of Present Trouble.—About six years ago she felt a lump in the left lower quadrant of the abdomen. About a year ago the abdomen became enlarged and continued to increase in size. On January 21st, 1907, felt distress in region of the stomach and has not been well since, but able to move around the house all the time.

The abdominal measurement was 43½ inches, and from the ensiform cartilage to the pubes 22 inches. She had never been jaundiced. The kidneys, heart and lungs were normal.

Operation.—She was admitted to the Chipman Memorial Hospital, April 16th, 1907, and operated on next morning. Dr. Mason administered the anæsthetic and Dr. Lawson assisted at the operation. On opening the abdomen we found a globular mass filling the abdomen and pelvis, glued to the parietal peritoneum of the front and sides by a web of adhesions but not attached to the viscera. The trocar plunged into it failed to evacuate any fluid. This proved to be in front a multilocular cyst, filled with fluid, some of a light amber and some of a gravish-white colour, too thick to flow through the trocar, and for the time giving the deceptive impression of a solid tumour. The lower and posterior part of the tumour however was one large cyst which when tapped discharged a dark, almost black fluid. The adhesions having been separated by the hand run over the tumour in front and on it's sides, and the fluid evacuated, the sac was delivered and the pedicle tied off in sections (it was broad) with strong silk.

This tumour was of the left ovary. The empty cyst weighed 2¼ pounds and the fluid caught weighed 30¼ pounds, making the weight 32½ pounds, but deceived by the negative result the first time I plunged in the trocar, as mentioned above, we were caught unprepared on the second and successful occasion, and much of the fluid was spilled over the table and floor, a conservative estimate of which was thought to be eight or ten pounds, so that the whole weight of the tumour was undoubtedly over forty pounds.

A tumour of the right ovary the size of an orange, was also removed. The wound was closed in layers, plain cat-gut for the peritoneum, kangaroo-tendon for the fascia, and silk-worm-gut interrupted sutures for the skin. The patient's temperature touched 100° on the afternoon of the two following days, but after that it never went above 99°. She did not even vomit from the ether; felt remarkably well and successfully undertook to show the younger patients how to recover. By the seventh day the wound was well healed and the skin stitches all removed.

About the end of the second week, the left leg became swollen its whole length, but not painful. It was wrapped in hot camphorated oil and cotton batting, and bandaged. This was changed daily. On May 8th, or in less than a fortnight, the swelling had disappeared and the patient was soon permitted out of bed and was discharged on May 21st after 35 days in the hospital. Since that time she has been doing her house work as usual.

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(3). INTER-LIGAMENTOUS CYSTIC TUMOUR, OVER ONE HUNDRED POUNDS IN WEIGHT.

The case I am now about to report is, I believe, unique in the experience of New Brunswick surgeons, an abdominal inter-ligamentous cystic tumour weighing over one hundred pounds successfully removed, with recovery of the patient.

I had been for some years the family physician at the home where this patient was house-keeper, but the circumstances were such that she could not see her way clear to risk an operation. However, Providence intervened and opened the way, while Nature made it clear that she must submit or soon succumb.

S. F. A., of Milltown, Maine; unmarried; age 44 years.

Family History:—Father died before she was born as a result of an accident. Mother died at her birth. Her only brother is living.

Personal History:—Health always good. Commenced to menstruate at the age of fifteen years. Has menstruated regularly until within the last year (1906) but will now frequently miss a period. Never excessive, lasts but two or three days, and never painful.

Present Trouble:—Eighteen years ago she first noticed an enlargement of the abdomen. The development was very gradual, but during the past three years it has been more rapid until now it is difficult for her to walk. She does not go out of the house, while last summer she could visit the neighbors. Eighteen months ago she had dyspnœa so badly for welve weeks that she could not lie down in bed, but continued to work and was not troubled in erect position. Her pulse is 90, heart sounds normal. For more than a year she has been losing flesh and is now very thin. At times the legs and feet swell.

On examination the cervix uteri was felt, but the fundus could not be

detected. The sound passed three inches.

When sitting, the abdomen nearly reaches the knees. In walking she bends backwards, to bring the load in line with the legs, and the arms hang down behind, clear of the body. The ribs are pressed outward like wings, the shoulders elevated almost to the ears, and the ensiform cartilage stands out at right angles to the sternum.

On January 5th, 1907, the circumference of her abdomen was 54 inches, the greatest circumference being seven inches above the navel. The distance from the ensiform cartilage to the navel was 18½ inches, and from the navel to the pubes 13 inches, making the whole distance from the ensiform cartilage to the pubes 31½ inches. On July 9th, 1907, or the day before the operation, the circumference of the abdomen at and for sev-

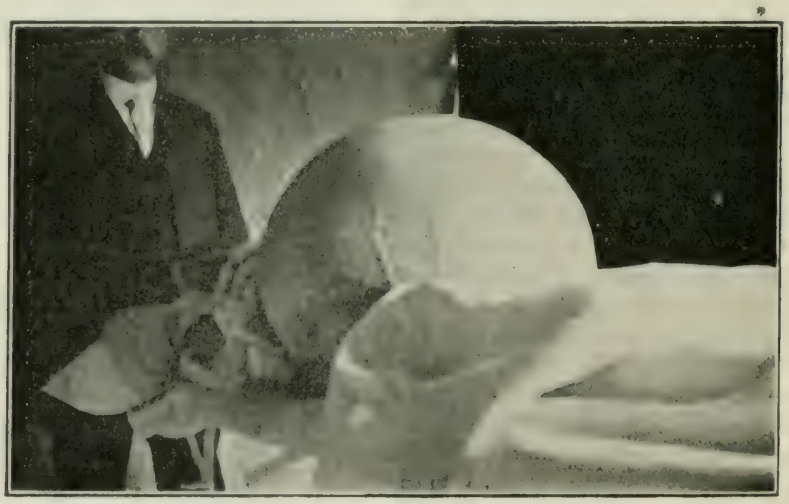

FIG. 3.

FIG. 4.

eral inches above the navel was 55 inches. From the ensiform cartilage to the umbilicus it measured 19 inches, and from the umbilicus to the pubes 13 inches, or from the ensiform cartilage to the pubes 32 inches.

The upper photograph on the card I pass around is an oblique view of the tumour from below. (Fig 3). The lower one is a side view, but the patient's dyspnœa was so great that she could not remain flat upon the table long enough for the second snap-shot to be taken, and as you can see, the upper part of the table and body have been raised so that the tumour does not look so well defined.

Operation.—On July 10th, 1907, the limbs were all bandaged and the patient placed upon the table. Dr. Mason administered the ether, only 350 grams being used during the whole operation. Dr. Webber was my assistant. After the ether was administered one nurse had to steady the tumour or the weight of it would have rolled the patient off the table.

I made my incision about five inches long between the umbilicus and pubes and on entering the abdomen, found no adhesions between the tumour wall and the parietal peritoneum. It was not until the trocar had emptied most of the sac, that I recognized it was not an ovarian, but an inter-ligamentous tumour. We then went through the peritoneum covering the sac, and dissected it out. When you realize that the fluid almost completely filled a large wash-tub, and that the sac was necessarily about the same size, you can conceive of the task before us. However, it stripped out without much difficulty and hæmorrhage was controlled. All the abdominal organs had been pushed by the tumour far up out of sight. Only one lone attenuated intestine had the courage from necessity to retain its position as a band of union, and maintain the integrity of that necessary canal. (Her bowels, by the way, had always been regular). The tumour came originally from within the left broad ligament and had, in pushing upward stripped the peritoneum up also from the left side of the abdomen. The excess of peritoneum that had covered the sac, we cut off, and united the edges with a running suture of cat-gut leaving a space for a drain at the lower end.

The left ovary was considerably enlarged and cystic, and was entirely removed. The right ovary was also somewhat enlarged and was resected, some of the healthy tissue being left. A drain was then placed at the lower angle of the wound through the peritoneum from which the immense cyst had been withdrawn, and another pushed down into the pelvis and both brought out through the lower angle of the abdominal wound which was closed—to save time—with through-and-through interrupted sutures of silk-worm-gut.

The patient was put to bed in good condition, the pulse at no time during the operation going above 104.

Convalescence was uninterrupted. The temperature ranged from normal to 99.6°. Only once did it touch 100° The pulse ranged between 72 and 90 after the second day.

The day following the operation the dressings were soaked with blood and fluid, and were changed. On the second day the dressings were again changed, and the drains removed. On the 19th, four stitches were removed, and on the 21st, or eleven days after the operation, all the stitches were removed and the wound was well and firmly healed.

The greatest difficulty the patient experienced was in clearing the throat or in coughing, both of which for a time seemed almost impossible. The ribs still maintained their abnormal position and a jacket was made with straps and buckles in front, that were tightened day by day, and for a long time, until the ribs were ultimately compressed into their proper position.

The patient has taken on flesh and is as healthy and active a woman now as you could wish to see.

The weight of the fluid and sac with the tub and basin that contained them was 112½ pounds, and the weight of the tub and basin (still wet with the fluid) was 13¾ pounds, leaving a net weight for the tumour of 98¾ pounds. But as mentioned, some of the fluid still moistened the tub and basin, while a quantity escaping from the trocar had missed the tub and spilled on the floor, and still more was lost as we rolled the sac from the wound, at least enough, my assistants thought, to make the tumour at least five pounds heavier. At any rate we are conservative in saying that it easily weighed over one hundred pounds.

This patient was operated on in her own home.

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(4). GALL-STONE IN COMMON DUCT, 2¼ INCHES LONG BY FOUR INCHES IN CIRCUMFERENCE.

My last report is that of a rather interesting case of a large gall-stone in the common duct.

Mr. G. W. B., of Stanley, York County, was admitted to my private hospital in Milltown, June 8th, 1908. His family physician, Dr. Moore, diagnosed the case as gall-stones and advised an operation. Four years ago he had been seen by some physician, who made a diagnosis of appendicitis and wanted to operate for that. His age is 28; unmarried; height 5 ft. 5½ inches; weight, 120 pounds (usual weight 145); occupation farmer and lumberman.

Family History.—Father died aged 48, of facial erysipelas. Mother, two brothers and four sisters are living, all in good health. One brother died in infancy.

Personal History.—Had only the ordinary diseases of childhood—never typhoid fever. When six or seven years of age he suffered from an attack of jaundice. Until twelve years of age, with that exception he was healthy, but from then until he was twenty-four he was subject to frequent attacks of cramps in the abdomen, sometimes with vomiting, that would last anywhere from two to twenty-four hours, and leave him sore for several days. For the past four years he had been comparatively free from trouble.

Present Attack.—In September, 1907 the trouble commenced again, and since that time he has hardly been free from pain. He has been jaundiced and has had clay-colourd stools. For the last three or four months the cramps and vomiting have come on about every fortnight. He controls them with morphia, but is left nauseated for several days. About the first of May he vomited considerable blood.

At the time he came to me there was general jaundice, no purpura, but great pruritis and the skin was abraded from scratching.

This is the kind of a case that one operates on with some degree of hesitation. Binnie says "All cases of obstruction due to stone in the common duct, in which purpuric spots are present in the skin, die from hæmorrhage if operated upon." Mayo

Robson prescribes the heroic exhibition of calcium chloride both before and after operation as "the great preventive of hæmorrhage which is so often fatal after operations on the jaundiced." Moynihan says, "I have never been convinced that this drug had any effect whatever in this direction, and though I formerly gave it a fair trial, I have now ceased to administer it."

I am informed that the animal serums are being used subcutaneously at the present time with apparently encouraging results.

Operation.—He was operated upon on the morning of June 10th, 1908. Dr. Mason administered the anæsthetic, and Dr. Webber was assistant. I made the Mayo Robson incision, found a long gall-bladder full of bile and a large stone in the common duct. I emptied the gall-bladder with a trocar, closed the wound into it with a pair of artery forceps, turned the lower border of the liver and the gall-bladder out over the ribs to straighten the common duct and make it present in the wound, incised the duct lengthwise and delivered a stone that measured 2¼ inches in length and 4 inches in circumference. With finger and scoop, other smaller stones were fished out, and a half inch rubber drain stitched into the opening with chromic cat-gut, and the balance of the wound in the duct closed with the same material. Another drain was put down over the right kidney, and still another into the gall-bladder. Its peritoneal surface string sutures (two) were tied so as to form a valve when the drain should be with-drawn. The drains were left protruding and the balance of the abdominal incision closed in layers, the gall-bladder being first united by a few sutures to the parietal peritoneum. The ends of the drains into gall-bladder and common duct were left long and passed into bottles to collect the bile.

In shape the stone was oblong. In colour it was very dark, almost black, and in substance it was not very compact so the surface could be easily rubbed off. After all these weeks of dessication and reduction in size from handling, the stone, at the present time weighs 255 grains.

For two days following the operation, the patient vomited frequently large quantities of bile which came up without difficulty, straining, or distress. During this time little was discharged through the gall-bladder drain, and less through that in the common duct. On the 13th, or third day, the abdominal drain was removed. By the 17th, all sutures were removed and the wound nicely healed above and below the drains. On the evening of the 17th, the bile flowing from the gall-bladder drain became bloody. The hæmorrhage was not severe but continued until the 19th. By the 20th the bile came clear again. On the 18th, the drain into the common duct was loosened up, and bile which until that time had hardly shown itself through that tube, commenced to flow out freely, but was not blood-stained, a contrast to that then coming from the gall-bladder. On the 20th both tubes were removed, and for days following, the dressings had to be frequently changed, for they became saturated in a very few hours. On the 23rd, streaks of blood appeared in the stools, and on the 24th he vomited a little blood and a free hæmorrhage occurred through the abdominal wound. This continued for about twelve hours, gradually disappearing until the bile again came

clear. Up until this time I had entertained little anxiety, but so free a hæmorrhage made things look rather interesting. I now had resort to the calcium chloride, which I ordered in thirty grain doses every four hours, and, whether as a result or as a coincidence, hæmorrhage stopped, appetite returned, jaundice disappeared, stomach pains and colicky abdominal distress ceased, and the almost typhoidal look gave place to the happy, hopeful expression of returning health.

The wound healed promptly and kindly, and he was discharged on July 6th, just four weeks after he entered the hospital and two days less than four weeks after he had been operated upon. He continues well, is taking on flesh, and enjoying his visit to a sister in Calais as if he had never been an invalid.

REPRINTS RECEIVED.

THE Diagnosis and Treatment of Rheumatism and Allied Affections," by Albert C. Geyser, M. D., New York. Reprinted from the *Journal of Advanced Therapeutics*, August, September and October, 1906.

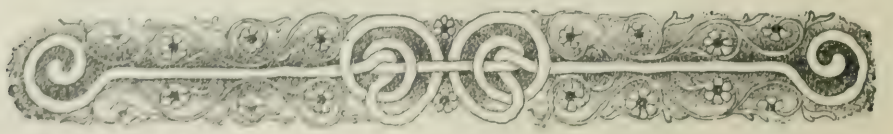
"The Supposed Beneficial Effects of Ozone a Popular Medical Fallacy," by Thos. Wm. Shæfer, M.D., Kansas City. Reprinted from the *Dietetic and Hygienic Gazette*, July 1908.

"The X-Ray in Dermatology; or Truth and Fallacy Concerning X-Ray Dermatitis," by Albert C. Geyser, M.D., New York. Reprinted from the *American Journal of Surgery*, May, 1908.

"Trichinosis of the Upper Respiratory Passages, with Report of Cases," by John Edmund Mackenty, M. D., New York. Reprinted from *American Medicine*, February, 1908.

"A Layman's View of Hospital Work," by J. Ross Robertson, Esq., Chairman of Board of Trustees of the Hospital for Sick Children, Toronto. Read at meeting of American Hospital Association, 1908.

Don't pour hot oil into the ear to relieve pain. Heat can be applied much better in a hot mixture of glycerine, alcohol and water, (which will not turn rancid or clog up the ear, and can be removed by syringing) with oil silk or "protective" rubber gauze wrung out in boiling water and closely applied over the ear, covered with water. A towel or large pad of tissues, is better than hot water bag. —*American Journal of Surgery.*



SOCIETY MEETINGS.

Annapolis-Kings Medical Society.

A MEETING of the Annapolis and Kings County Medical Association was held recently in Wolfville.

Most of the time of this session was given to hearing and discussing a very able and learned paper on chlorosis, by Dr. E. F. Moore, of Wolfville. The writer quoted many able authorities as to the origin and treatment of this disease, and gave as his own views that in addition to improper nutrition or lack of good assimilation, the strenuous demands of modern society and higher education upon young people was a large contributing factor. The discussion was participated in by Dr. A. P. Reid, Dr. Moore, Kentville; Dr. Birt, Dr. Bowles and Dr Webster, of Edinburgh, and strong opinion was expressed that modern demands upon young girls are too exciting and the nervous strain is being felt, and diseases of the nerves are increasing.

The President, Dr. DeWitt, read a most excellent and instructive paper on "Does Medicine Progress?—the Etiology of Tuberculosis and the Need of Municipal Sanatoria." The writer showed the great progress that medicine has made in recent years in resisting the ravages of the plague, cholera, small-pox, diphtheria, yellow fever and other scourges, and contended that intelligent and persistent co-operation on the part of the medical profession and the governments could entirely abolish the great white plague.

This interesting paper was followed by one from Dr. Smith Walker, of Truro, who is Secretary of the Colchester Association for the Prevention of Tuberculosis, and has been indefatigable in his efforts to awaken public interest in this preventable disease. The subject "Economics of Tuberculosis," was a most vigorous and able exposition of the subject. He drew a most alarming picture of the ravages of consumption and the serious financial loss it entails upon the country.

W. E. Roscoe, barrister, of Kentville, followed with a practical paper on "The Municipality and Sanatoria," in which he demonstrated the feasibility by intelligent co-operation of establishing sanatoria, either by the counties or by the province, where scientific treatment could be had at a moderate expense.

Dr. A. P. Reid strongly supported the views of the previous speakers and enlarged upon the dangers from bovine infection, and gave some startling facts as to lurking germs in milk and butter.

Dr. George Johnson followed by some interesting statistics comparing the results of the last census with that of 1860. He showed the great progress made in prevention of disease and the people's indebtedness to the medical profession for the greatly improved state of public health during the last forty years.

Dr. W. T. Woodworth also supported vigorously the necessity of combined intelligent action in fighting this deadly infection.

The reception given by Dr. and Mrs. DeWitt at their residence in honor of the visiting physicians and others, was pronounced a great success. The weather was ideal and the spacious grounds were gay with prominent people of the town who came to pay their respects to the hospitable entertainers and to the members of the Medical Society.

OBITUARY.

DR. Charles Bent, of Truro, N. S., died on August 13th, 1908. Dr. Bent had been in his usual good health up to the afternoon of his death; about 6 o'clock he complained of not feeling well, but partook of his evening meal as usual, after which he attended to his household and other duties, and about 7 o'clock retired to his surgery, where a short time afterwards, he was found by his daughter, reclining on a couch; she, alarmed at his strange appearance, called a physician, who on his arrival found that he had passed away to the life beyond.

Dr. Bent was born at Amherst on January 10th, 1826, and was the son of John Bent, whose father had been one of the original grantees of land, in the county of Cumberland.

After receiving his general education at Sackville, N. B., he entered the University of Pennsylvania Medical School, from which he received the degree of Doctor of Medicine in 1847.

After practicing his profession at Pugwash, for a few years, he removed to Truro in 1853, where he continued in active practice until the time of his death.

He took a keen interest in everything pertaining to the welfare of the medical profession. Dr. Bent was present at the organization of the Medical Society of Nova Scotia, at Halifax, in 1853, being the only one present from outside the city.

He was a regular attendant at the meetings of the Colchester Medical Society, and his presence and contributions added much to the success of the society.

The University of Pennsylvania, from which Dr. Bent graduated, felt honoured by his distinguished career. The "old Pennsylvania *Weekly Review*" in referring to his 61st anniversary, said: "On behalf of the University of Pennsylvania we extend to Dr. Chas. Bent, of Truro, congratulations on the 61st anniversary of his degree, and gratitude for the honour which his distinguished life has reflected upon the university."

Although busily engaged with a large general practice, he found time to devote to puplic affairs, being at one time a commissionr of schools, Health Officer, Coroner of Colchester and Mayor of Truro, 1882 and 1883.

Dr. Bent was ever held in the highest esteem by his fellow citizens. Having held many responsible positions, he was always faithful to every charge committeed to him.

A widow, one son and a daughter survive; to whom on behalf of the profession the NEWS extends its deep sympathy.

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DR. McLENNAN.

Many appreciative comments have appeared in the press regarding the late Dr. McLennan, of Inverness, some of which we reproduce herewith. *The Pictou Advocate* said that "he was easily the strongest man politically in his county and could and did defeat every combination formed against him. He had his faults, but there was plenty of good red blood in his veins and the people liked him." *The Eastern Chronicle* said, "Literally he died in harness; died in the service of his country. He will be lamented by his personal and political friends, and even his political opponents cannot say that he was

not a vigorous and courageous fighter."

In speaking of the funeral, *The Port Hood Greetings* said: "The funeral of the late Dr. McLennan took place from his late residence at Inverness, on Sunday morning, at 10.30 o'clock. The day was fine, and the assemblage unusually large. From all parts of the country men and women came to pay their last tribute of respect to one whom they loved and respected. Several prominent laymen were present, including His Honour Judge McKenzie, North Sydney; Mr. William Chisholm, M. P., Antigonish; Hon. J. E. Corbett, Harbour-au-Bouche; Hon. Jas. McDonald, M. P. P., Dr. McLeod, North Sydney.

"A special train from Hawkesbury brought about 500 mourners from the southern portion of the county.

"The remains were taken to the Catholic church, where a Requiem Mass was offered up, the celebrant being a nephew of the deceased, Rev. Father McLennan, recently ordained There were several clergymen in the Sanctuary. Rev. Father Laffin, Tracadie, preached briefly, and paid a tender tribute to the memory of the doctor.

"The members of the C.M.B.A. and L.O.C. of Inverness, reinforced by brother members from Port Hood, were in the funeral procession, which was a very impressive pageant. Fully 3,000 persons followed the remains to their last resting place in the Catholic cemetery."

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LATE JOHN SUTHERLAND, M. D.

There died suddenly in Montreal, of heart disease, on Sunday night, October 11, ult., John Sutherland, M.D., of Bedeque, one of P. E. Island's best known physicians. The deceased was returning from a post-graduate trip to Chicago, and remained over in Montreal, where he retired to his room at 9.30 o'clock. Next morning it was found that his spirit had taken its flight.

John Sutherland was a man of herculean proportions. He was born at

THE LATE DR. SUTHERLAND, of Bedeque, P. E. I.

Stanley Bridge 62 years ago. He was a graduate of the University of Pennsylvania, Class of 76. He was ex-President of the Prince Edward Island Medical Society, and ex-Vice-President Maritime Medical Association. The deceased was a good physician, a true and loveable man, and highly respected by everybody.

His funeral, which took place from his home on the 17th, was very largely attended by both the profession and the laity. He leaves a wife, nee Miss McFarlane, of Bedeque, but no children.

PERSONALS.

DR. J. L. Cock left Halifax last month to take up practice in Truro. His many friends will wish him every success.

Dr. Florence O'Donnell, of this city, and Wm. H. Piers, of the Furness-Withy Company, were united in marriage on the 6th of October. Dr. O'Donnell recently returned from missionary work in China, where she met with much success. The NEWS extends its congratulations.

Dr. Jemima MacKenzie, a graduate of Dalhousie, has lately returned from Cawnpore, East India, where she was engaged as a medical missionary for nearly three years. Dr. MacKenzie will take up post graduate work in New York before returning to India.

Among the marriage announcements which we omitted to announce previously were that of Dr. P. A. Macdonald, of this city, and Dr. E. E. Sinclair, of Folly Village. The NEWS extends its congratulations.

Drs. E. B. Roach, E. D. Farrell, F. V. Woodbury, M. A. Macaulay and H. K. MacDonald, have been appointed assistants on the visiting staff of the Victoria General Hospital.

Dr. J. J. Doyle was elected President of the Halifax and Nova Scotia Branch of the British Medical Association at its annual meeting last month. Dr. Doyle recently returned from a vacation trip to the West Indies.

Dr. J. R. Corston was married on the 4th inst. to Miss Frances B. MacDiarmid, of Fenelon Falls, Ontario. The bride was for a short while nurse in charge of the operating room of the Victoria General Hospital, and proved most efficient in her duties. "Jimmie" kept things somewhat quiet and rather surprised most of his medical friends. The officers of the Army Medical Corps presented the happy couple with a very handsome wedding gift. The NEWS extends its hearty good wishes.

Drs. A. C. Hawkins and A. A. Schaffner were the victims of diphtheria recently, but fortunately soon recovered.

Dr. W. H. Macdonald, of Rose Bay, has lately returned from post graduate work in New York. Dr. MacLean, of the Victoria General Hospital, looked after Dr. Macdonaid's practice in his absence.

Dr. J. L. Churchill, formerly of Goldboro, has bought the practice of Dr. March, M.P.P., Bridgewater, and is now located in that town.

The NEWS extends its sympathy to Dr. L. M. Silver, and Dr. E. Douglas of this city also to Drs. L. W. and E. I. Johnstone, of Sydney Mines, in their recent bereavements.

We learn from the Digby *Courier* that Dr. and Mrs. Louis H. Morse received a pleasant surprise recently when a number of their friends who had remembered it was the 10th anniversary of their wedding, called laden with tin gifts of almost every description. The genial doctor received a telephone call at his office that he was wanted at home and his surprise was certainly an agreeable one. A general good time was indulged in by everyone, and the NEWS joins their numerous friends in wishing them many happy returns.

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A cleanly, convenient and very palatable method of administering Lactopeptine, especially for ambulant patients.

The tart, pineapple flavor, renders these tablets as acceptable as confections. They are particularly valuable as "After Dinner Tablets," to prevent or relieve pain or distension occurring after a heavy meal.

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WITH CREOSOTE

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DOSE—One to two tablespoonfuls three to six times a day.

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A highly efficient (non-acid) antiseptic solution, of pleasant balsamic taste and odor. Absolutely free from toxic or irritant properties, and does not stain hands or clothing.

Formaldehyde, 0.2 per cent.
Aceto-Boro-Glyceride, 5 per cent.
Pinus Pumilio, Eucalyptus, Myrrh, Storax, Benzoin, } Active balsamic constituents.

SAMPLE AND LITERATURE ON APPLICATION.

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Dr. H. A. Chisholm, formerly of Glace Bay, is now located at 129 Spring Garden Road, this city.

Dr. M. A. Lindsay, who spent some weeks at his home in Halifax, returned to Edinburgh last month. Dr. Lindsay has devoted much of his time to pathological work, and during his undergraduate career attracted the attention of the pathologists under whom he studied by the skill and accuracy of his work. He intends to continue his pathological studies for some time. He is a nephew of Dr. A. W. H. Lindsay.

There will be an election at the beginning of December to fill a vacancy on the Newfoundland Medical Board, caused by the resignation of Dr. Tait. The election is by vote of the medical men of the Island, and the voting papers must be returned by November 30th.

Dr. R. A. Brehm, Health Officer, St. John's, Nfld., was in attendance at the Tuberculosis Congress at Washington, D.C. He has always been interested in the fight against Tuberculosis and has evidently received fresh impetus from his visit to the congress.

Dr. McDougall's friends in Amherst and throughout the country, will be pleased to know that he is improving at Highland View Hospital.

Ferrona wants a doctor. A gentleman from there who was in the *Enterprise* office this week, asked us to make known this fact. The large and flourishing villages of Ferrona and Eureka and the surrounding districts, Sunny Brae, Springville, Bridgeville, offer a splendid field.—*New Glasgow Enterprise*.

A dinner party was given in honour of Dr. and Mrs. C. S. Morton, Port Greville, N. S., by a few of their friends, previous to their de-

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The desideratum for the relief of this condition is a remedy which will not only stimulate contraction, but will impart tone to the uterus as well. Such a remedy is Hayden's Viburnum Compound. Its action is superior to and far more lasting than Ergot and is devoid of the toxic effects of this drug.

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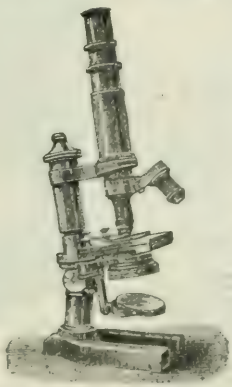

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WRITE FOR OUR LATEST QUOTATIONS

parture for Vienna, where the Doctor has gone to take a special course in surgery.

Dr. John Bell, of New Glasgow, N. S., with his wife and little daughter, returned recently from their annual visit to the city of New York. They were absent a month.

Dr. C. H. Clarke, Medical Superintendent of the Hospital for the Insane, at Toronto, has been appointed Dean of the Faculty of Medicine of Toronto University, *vice* Dr. Reeve, resigned. Dr. Clarke is recognized as the most eminent alienist in Canada, and is known to be a most capable administrator. We feel sure that his appointment will prove to be a wise one and that under his guidance the medical school of Toronto University will do more than maintain the high place it has reached amongst the best schools of the world.

NOTES ON SPECIALTIES.

REMARKS ON GLYCO-THYMOLINE.

By W. R. Blackwood, M. D.,
Philadelphia, Pa.

For maany years past this preparation has been one of my mainstays in disease of the mucous membrane, and it has held its place despite the trials of many other agents warranted to supplant it by the advocates who decried Glyco-Thymoline when I spoke of its virtues. Space is now getting too valuable to waste with long detailed descriptions of separate cases, and anyhow I never did write in that manner. I think general remarks about agents is the better way and we need this more than stories of symptoms and temperatures, with daily alterations. No class of maladies is more troublesome than disorders of the mucous membranes and none

Glyco-Thymoline

IS INDICATED FOR

CATARRHAL CONDITIONS

Nasal, Throat, Intestinal, Stomach, Rectal, and Utero-Vaginal.

SAMPLES ON APPLICATION.

KRESS & OWEN COMPANY
210 Fulton St., NEW YORK

more difficult to eradicate thoroughly, and we have been put to our wit's end many times for remedial agents in such cases. The local treatment of catarrhs is frequently disappointing and none more so than the prevalent one—post-nasal catarrh. Unless we can get an alterative condition established, little good is done, and nothing has been of greater service to me than Glyco-Thymoline, locally and internally. In several hundreds of long standing and severe cases of this intractable and common affliction I have come to regard this preparation as a standard and almost routine remedy. I seldom care for a post-nasal trouble without prescribing it at the onset and if I don't it is not long before it comes into use. It is just alkaline enough, just so as to the dialysis (the action locally with exactly the right amount of fluid excretion through the diseased membrane), just enough astringent without drying the parts and just the right thing in the direct line of reparative work; it sets up tissue building soon after the membrane gets somewhere near its right shape. Many things are employed in catarrh, but I firmly believe that if I was confined to one agent only, that would be Glyco-Thymoline. For years I used the so-called antiseptic tablets of boric acid and glycerin, etc., with good results, but for a long time past I use it in about half strength with a K. & O. nasal douche, and from twice to four times daily. With this, in bad cases I give it internally, adding to it or giving separately, mercuric bichloride, and if done separately the menstrum is compound syrup of stilling-

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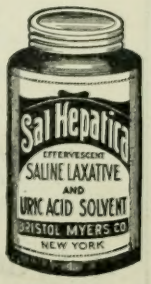

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The recent enlargement and improvements at the Victoria General Hospital have increased the clinical facilities, which are now unsurpassed. Every student has ample opportunities for practical work.

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In gastritis, chronic enteritis, vaginitis, gonorrhœa and in recurring attacks of what in many instances is deemed appendicitis, I use this agent freely, and always with good results.

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* Contribution to "Symposium on Rheumatism," read before Toronto Clinical Society.

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(= Arsenious Acid 1/50 gr.)	(= Arsenious Acid 1/50 gr.)

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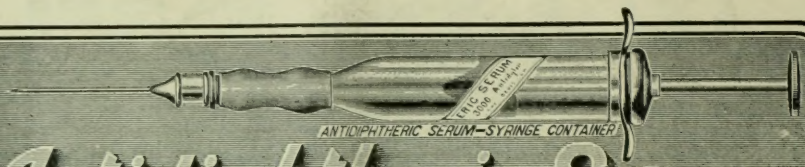

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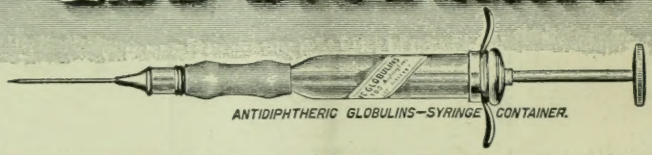

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